

ORDNANCE FIELD SERVICE

## BASE SHOP DATA



**Rifle, Auto., Cal. .30, Browning  
M1918A2**

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PREPARED UNDER THE DIRECTION OF THE  
CHIEF OF ORDNANCE

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ROCK ISLAND ARSENAL, FEB., 1943

16 October 1943\*

Ordnance Field Service Base Shop Data

**Rifle, Auto., Cal. .30, Browning  
M1918A2**

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**Rifle, Auto., Cal. .30, Browning****M1918A2**LIST OF REFERENCESSTANDARD NOMENCLATURE LISTS

List of Drawings	51-90
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Tools, Maintenance, for repair of Automatic guns, automatic gun Antiaircraft materiel, Automatic and Semiautomatic cannon, and Mortars - individual items and parts	SNL A-35
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Sights, Bore (Small Arms & Field Artillery-Parts)	SNL F-10
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Ammunition, rifle and automatic gun	SNL T-1
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FIELD MANUALS

Ordnance Field Manual	FM 9-5
Ordnance Field Maintenance	FM 9-10
List of Publications for Training	FM 21-6
Defense Against Chemical Attack	FM 21-40
Browning Automatic Rifle, Cal..30, M1918A2 with Bipod	FM 23-15
Browning Automatic Rifle, Cal..30, M1918A2 without Bipod	FM 23-20

TECHNICAL MANUALS

Cleaning, Preserving, Lubricating & Welding Materials and Similar Items (Now published as TR1395-A)	TM 9-850
Browning Automatic Rifle, Cal..30, All types	TM 9-1211
Field Glass, Type EE	TM 9-1611

ORDNANCE FIELD SERVICE BULLETINS

Maintenance of materiel in hands of troops	OFSB 4-1
Electric & Oxyacetylene Welding	OFSB 5-2

Ordnance Field Service Base Shop Data**Rifle, Auto., Cal. .30, Browning  
M1918A2**

## CONVERSION LIST OF TOOL DRAWINGS

<u>B.S.D. NO.</u>	<u>O.O. NO.</u>	<u>NOMENCLATURE</u>
908977	B316001	Alignment Tool, Buffer Tube B147493
908979	B316002	Fixture, Rear Sight Base
908981	B316003	Fixture, Holding, Leaf, Rear Sight
909006	B316004	Test Tool, Length of Bolt Assem. B19695
909179	B316005	Wrench - To Remove & Replace Barrel
909180	B316006	Block, Vise, Barrel Holding
	A77201	Gage, Ring
	A77204	Gage, Plug
	B147001	Reflector, Barrel
	C7719	Gage, Headspace, Cal.30
	C64145	Tool, Combination
A2401	D7106205	Fixture, Grinding, Bolt Block Assem.

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## Rifle, Auto., Cal. .30, Browning M1918A2

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ROCK ISLAND ARSENAL, - FEB., 1943

B.S.D. No.

**Dismantling**

1

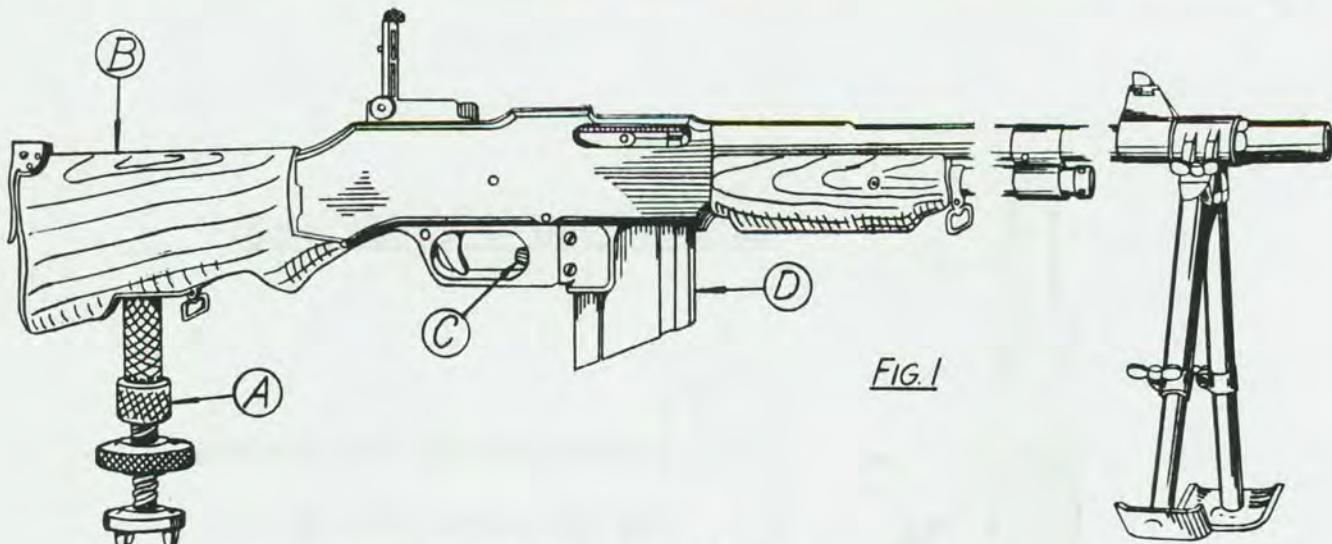
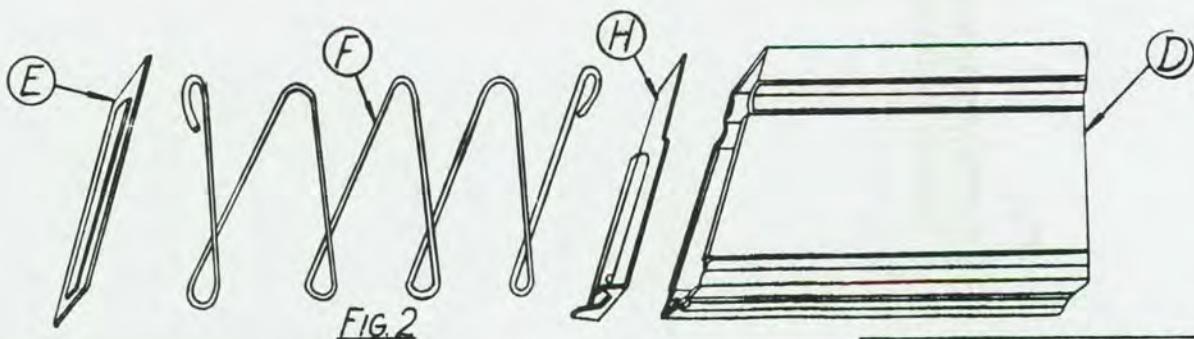


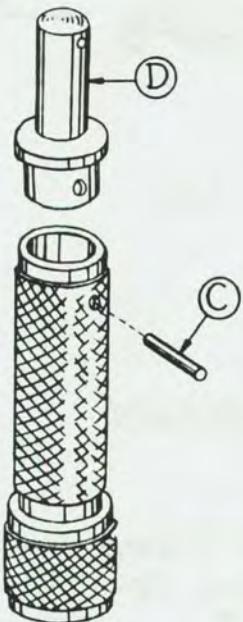
FIG. 1

REMOVAL OF STOCK REST AND MAGAZINE

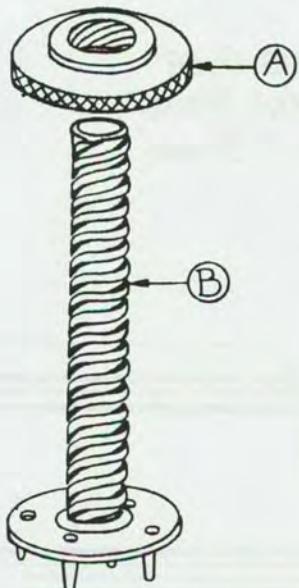
- 1 PULL THE STOCK REST (A) FROM THE BUSHING IN STOCK (B), FIG. 1. PRESS MAGAZINE RELEASE (C) AND REMOVE MAGAZINE (D)
- 2 SLIDE OUT BASE (E), KEEPING THUMB OVER BOTTOM OF MAGAZINE (D) TO PREVENT SPRING (F) FROM FLYING OUT, FIG. 2. REMOVE SPRING (F) AND FOLLOWER (G).



BAR-30-M1918A2-DISM-1(13)

DISMANTLING OF STOCK REST

③ LOOSEN LOCK (A) AND UNSCREW  
LEG (B). SCREW LOCK (A) OFF  
LEG (B). DRIVE OUT PIN (C) AND  
REMOVE STEM (D).



SMALL ARMS  
RIFLE, AUTO.  
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## DISMANTLING

SHEET  
3  
OF 13

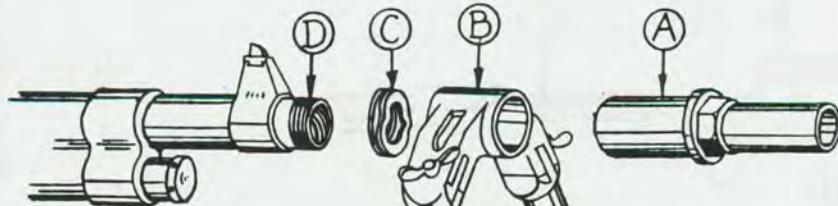
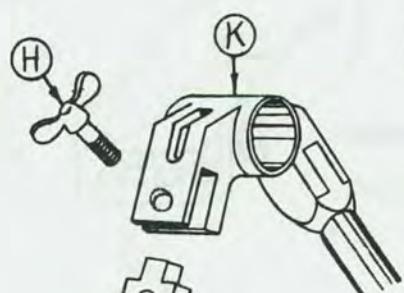


FIG. 1

REMOVAL OF BIPOD

④ UNSCREW FLASH HIDER (A),  
FIG. 1, REMOVE THE BIPOD (B)  
FROM THE FLASH HIDER  
(A) AND THE FRICTION  
WASHER (C) FROM BARREL (D).

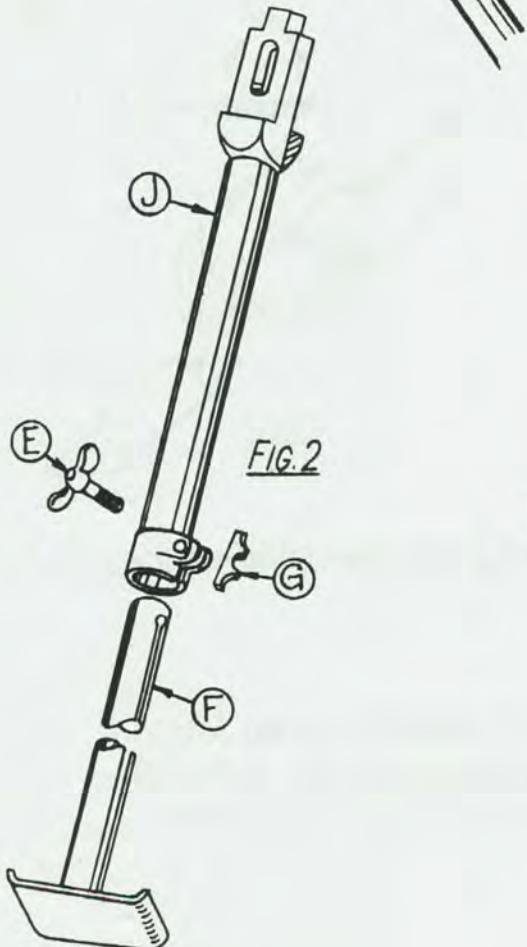
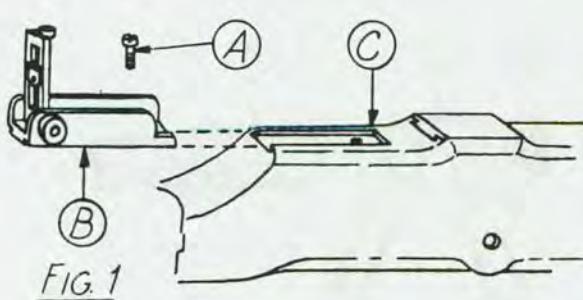


FIG. 2

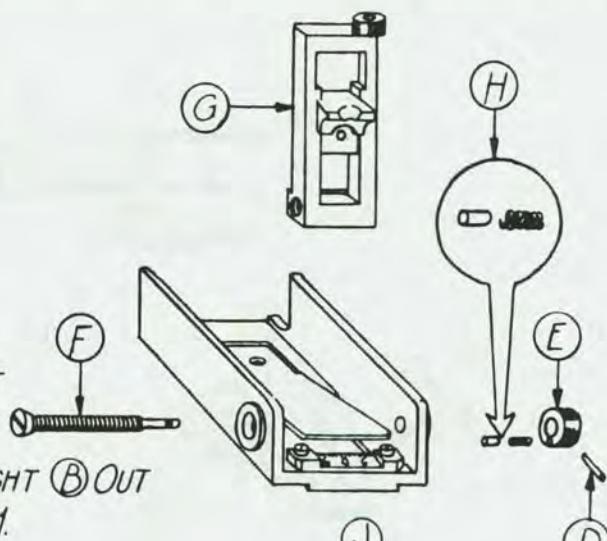
DISMANTLING OF BIPOD

⑤ REMOVE SCREW (E). SLIDE OUT  
LEG (F) AND REMOVE KEY (G).  
FIG. 2. REMOVE SCREW (H) AND  
PULL TUBE (J) FROM BODY (K).

BAR-30-M1918A2-DISM-303)

REMOVAL AND DISMANTLING OF REAR SIGHT

6) EXTRACT SCREW (A) AND DRIVE REAR SIGHT (B) OUT OF RECEIVER (C) WITH A BRASS BAR, FIG. 1.



7) DRIVE OUT PIN (D), FIG. 2. REMOVE KNOB (E). UNSCREW WINDAGE SCREW (F). REMOVE SIGHT LEAF (G). PULL SPRING AND PLUNGER (H) FROM KNOB (E).

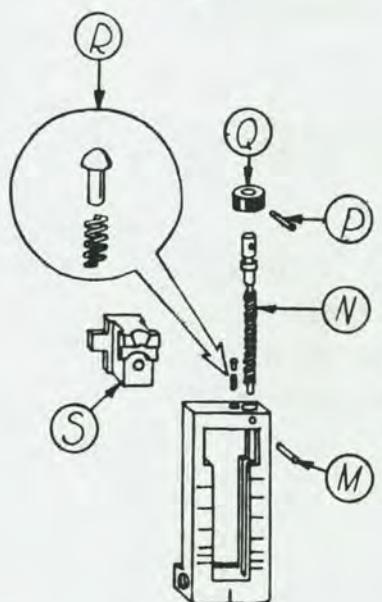
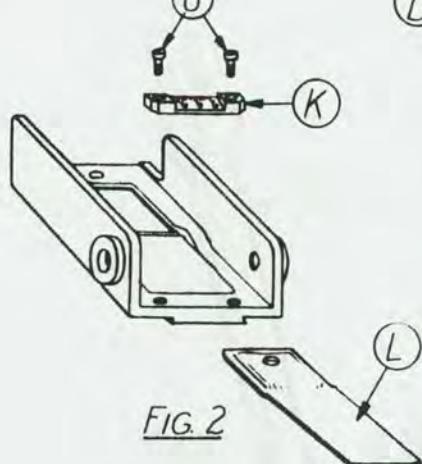
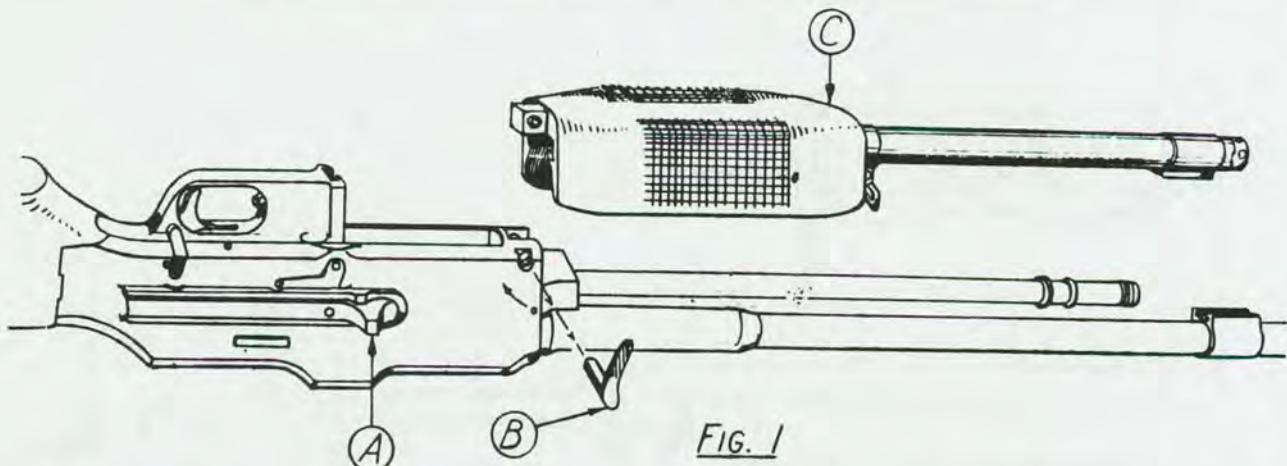


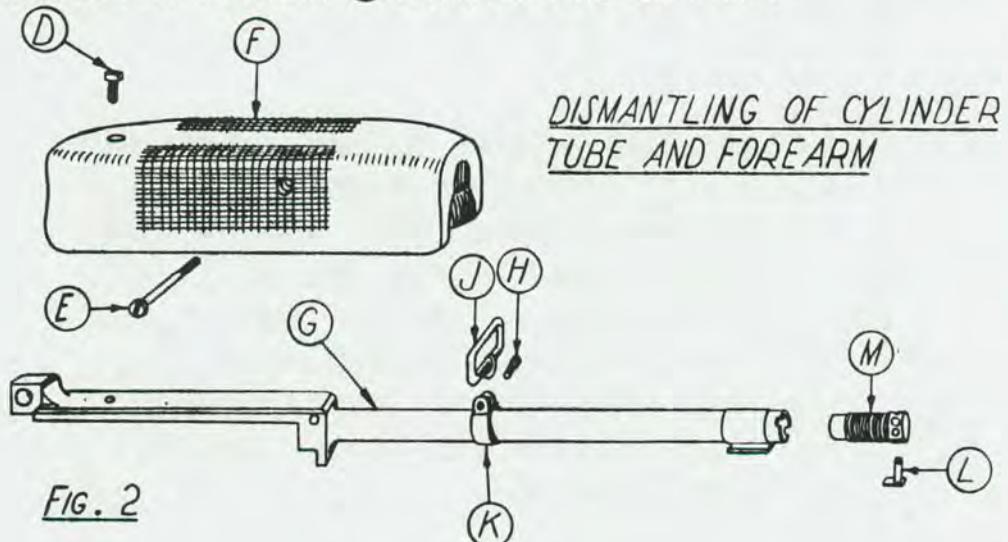
FIG. 3

8) EXTRACT TWO SCREWS (J) AND REMOVE WINDAGE SCALE (K). PULL OUT SPRING (L).

9) TAP OUT PIN (M), FIG. 3. REMOVE ELEVATING SCREW (N). DRIVE OUT PIN (P) AND REMOVE KNOB (Q). REMOVE SPRING AND PLUNGER (R). LIFT SLIDE (S) TO TOP OF SIGHT LEAF AND REMOVE.

REMOVAL OF CYLINDER TUBE AND FOREARM

10 COCK THE GUN BY RETRACTING OPERATING HANDLE (A) AND RETURNING TO FORWARD POSITION. TURN GAS CYLINDER TUBE RETAINING PIN SPRING (B) 180° IN CLOCKWISE DIRECTION. PULL OUT RETAINING PIN SPRING (B) SLIDE CYLINDER TUBE AND FOREARM (C) FORWARD AND LIFT UP.

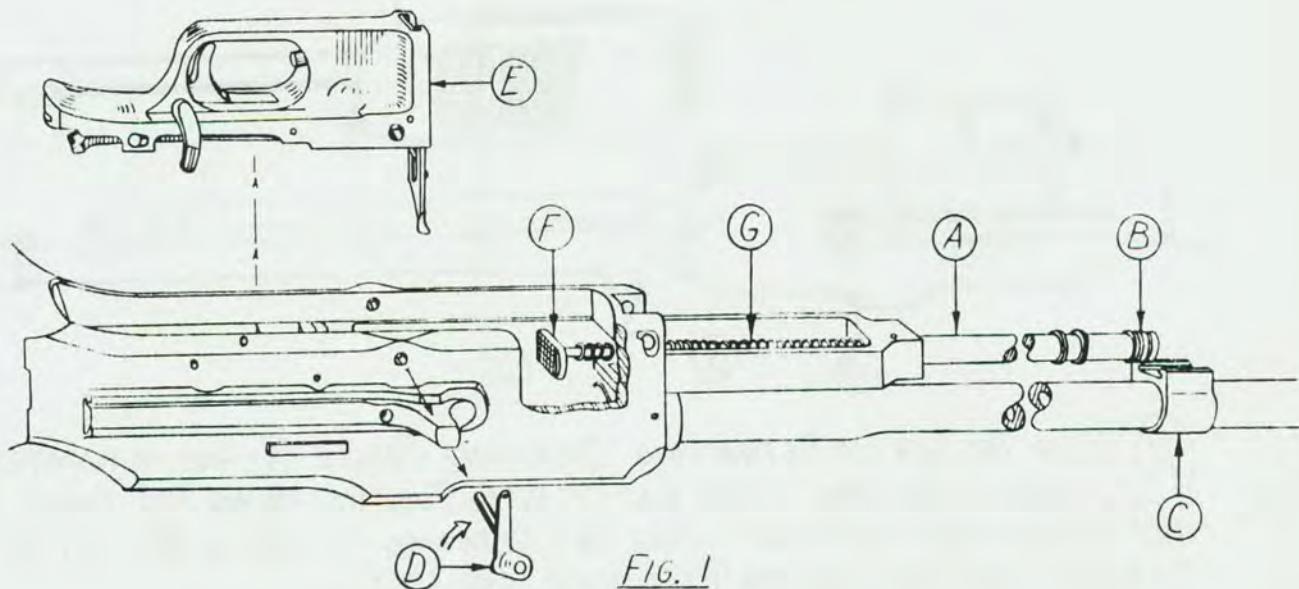


11 REMOVE SCREW (D) AND SCREW (E). LIFT FOREARM (F) FROM GAS CYLINDER TUBE (G). REMOVE SCREW (H) AND SLING SWIVEL (J). PRY OPEN BRACKET (K) AND REMOVE FROM TUBE. DRIVE OUT GAS CYLINDER LOCK (L). UNSCREW GAS CYLINDER (M).

SMALL ARMS  
RIFLE AUTO.  
CAL.30  
BROWNING  
M1918 A2

## DISMANTLING

SHEET

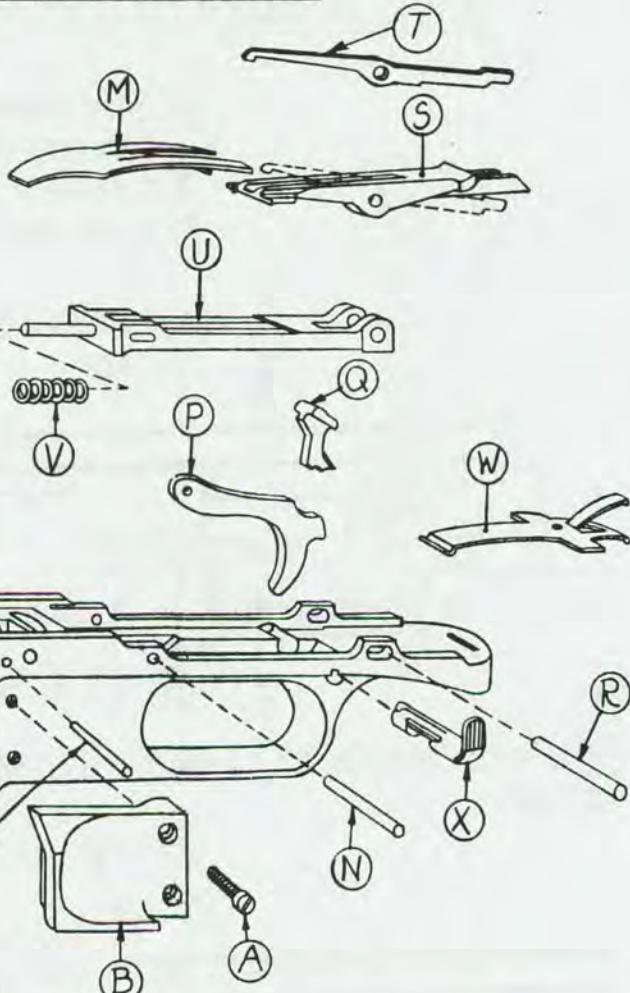
6  
OF 13REMOVAL OF TRIGGER GUARD GROUP, RECOIL GUIDE AND SPRING

(12) PULL THE TRIGGER, HOLDING THE PIS. ON ROD (A) TO PREVENT PISTON (B) FROM STRIKING BRACKET (C). TURN TRIGGER GUARD RETAINING PIN SPRING (D) 90° IN A CLOCKWISE DIRECTION AND PULL OUT. LIFT OUT TRIGGER GUARD GROUP (E). TURN RECOIL SPRING GUIDE (F) 90° TO RIGHT OR LEFT AND REMOVE GUIDE (F) AND SPRING (G).

## DISMANTLING OF TRIGGER GUARD GROUP

13

REMOVE TWO SCREWS **A** AND LEFT PLATE **B**. REMOVE TWO SCREWS **C** AND RIGHT PLATE **D**.



14

DEPRESS EJECTOR LOCK **E**. HOLD THUMB IN FRONT OF MAGAZINE CATCH SPRING **F** AND SLIDE EJECTOR **G** UPWARD AND OUT. REMOVE MAGAZINE CATCH SPRING **F**. PUNCH OUT MAGAZINE CATCH PIN **H**. LIFT OUT MAGAZINE CATCH **J** AND MAGAZINE RELEASE **K**. PULL OUT EJECTOR LOCK **E** AND SPRING **L**.

15

PLACE SCREWDRIVER UNDER SEAR SPRING **M** AND PULL UPWARD AND TO THE REAR OF TRIGGER GUARD. PUSH OUT TRIGGER PIN **N**. REMOVE TRIGGER **P** AND CONNECTOR **Q** THROUGH TOP OF TRIGGER GUARD. PUSH OUT SEAR PIN **R**. LIFT OUT SEAR **S** AND SEAR LEVER **T**. PRY UPON SEAR CARRIER **U** AND LIFT OUT. REMOVE C' RECOIL SPRING **V**. PRY CHANGE LEVER SPRING **W** OUT OF SEAT AND REMOVE FROM REAR OF GUARD. PULL OUT CHANGE LEVER **X**.

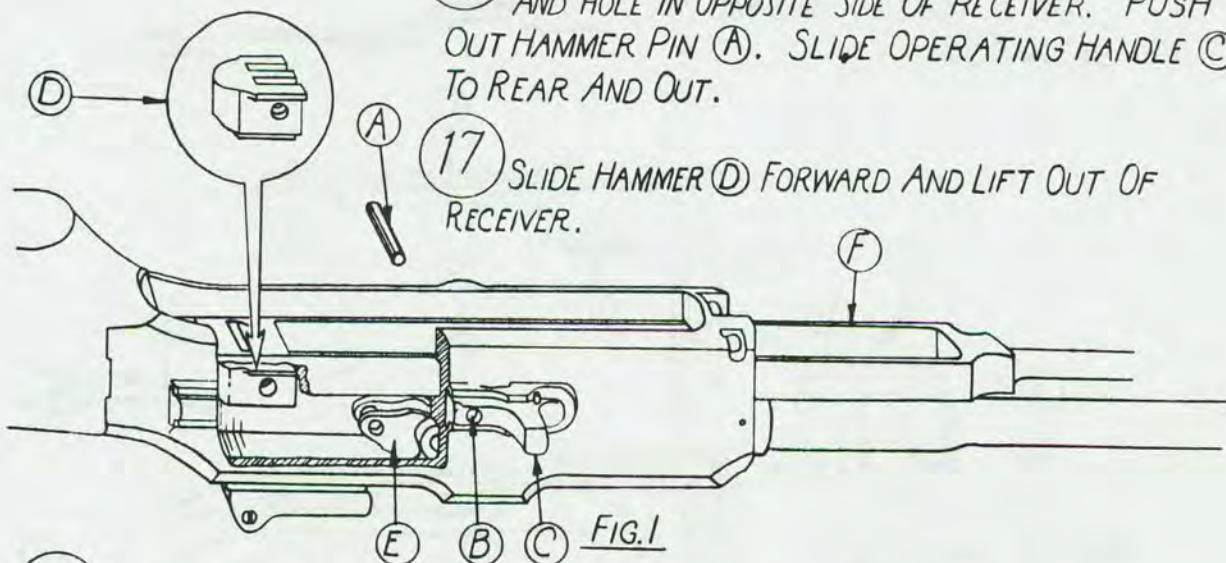
SMALL ARMS  
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## DISMANTLING

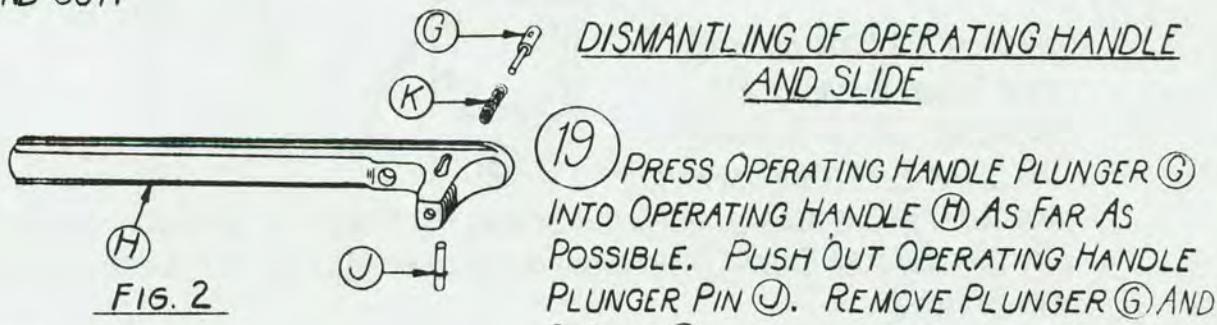
SHEET

8  
OF 13REMOVAL OF HAMMER, OPERATING HANDLE AND SLIDE

16) ALIGN HAMMER PIN **A** WITH HOLE **B** IN OPERATING HANDLE AND HOLE IN OPPOSITE SIDE OF RECEIVER. PUSH OUT HAMMER PIN **A**. SLIDE OPERATING HANDLE **C** TO REAR AND OUT.

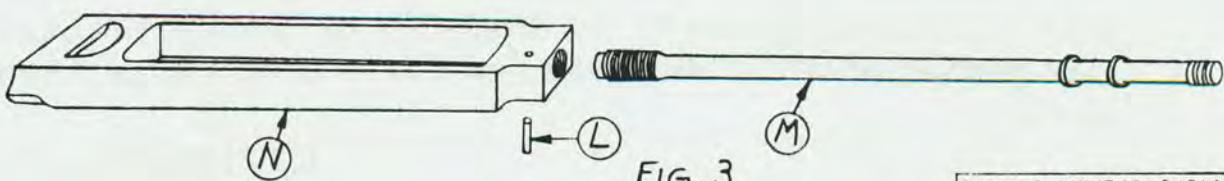


18) PRESS DOWN ON BOLT LINK **E** ALLOWING SLIDE **F** TO BE PULLED FORWARD AND OUT.



19) PRESS OPERATING HANDLE PLUNGER **G** INTO OPERATING HANDLE **H** AS FAR AS POSSIBLE. PUSH OUT OPERATING HANDLE PLUNGER PIN **J**. REMOVE PLUNGER **G** AND SPRING **K**.

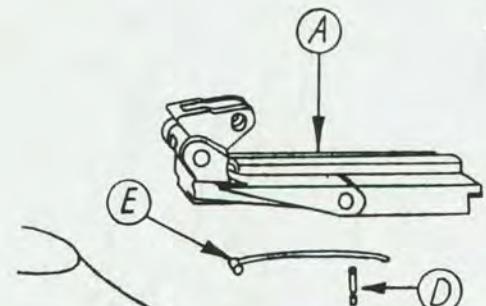
20) PUNCH OUT PIN **L**. UNSCREW GAS PISTON **M** FROM SLIDE **N**.



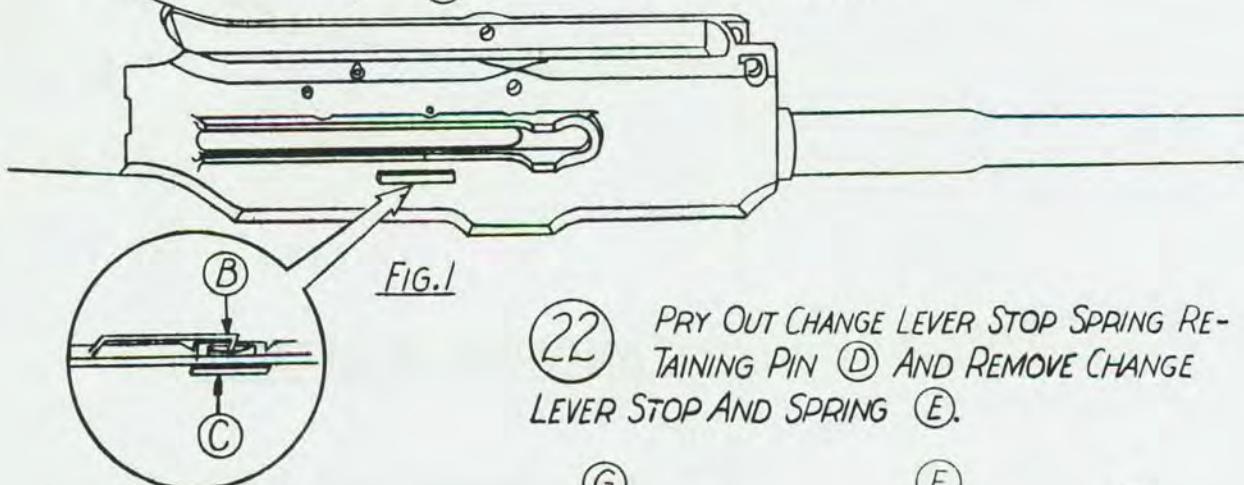
BAR-30-M1918A2-DISM-8(13)

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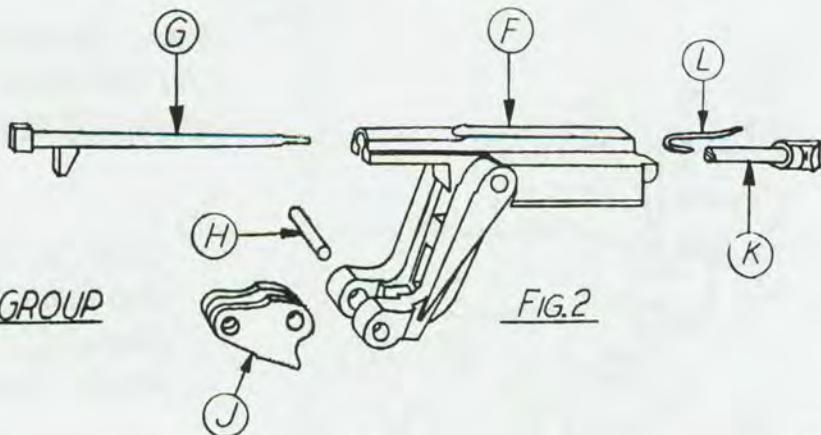
## DISMANTLING

SHEET  
9  
OF 13REMOVAL OF BOLT GROUP, BOLT GUIDE  
AND CHANGE LEVER STOP

21 SLIDE BOLT GROUP A TO REAR AND LIFT OUT. WITH A SCREWDRIVER REMOVE SPRING B FROM SEAT IN BOLT GUIDE C. LIFT SPRING B FROM RECEIVER. BOLT GUIDE C CAN BE PULLED FROM OUTSIDE OF RECEIVER.



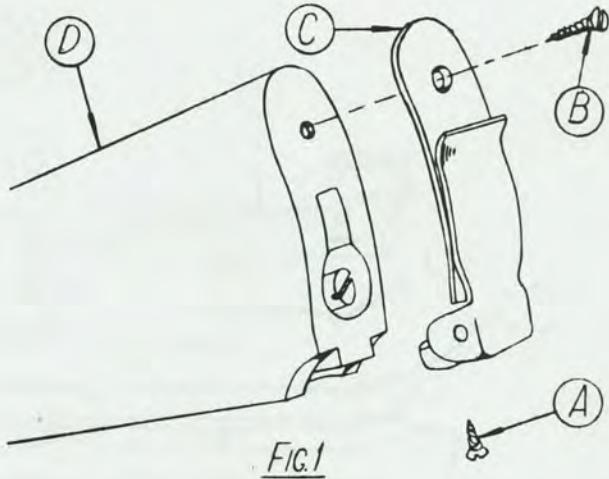
22 PRY OUT CHANGE LEVER STOP SPRING RETAINING PIN D AND REMOVE CHANGE LEVER STOP AND SPRING E.

DISMANTLING OF BOLT GROUP

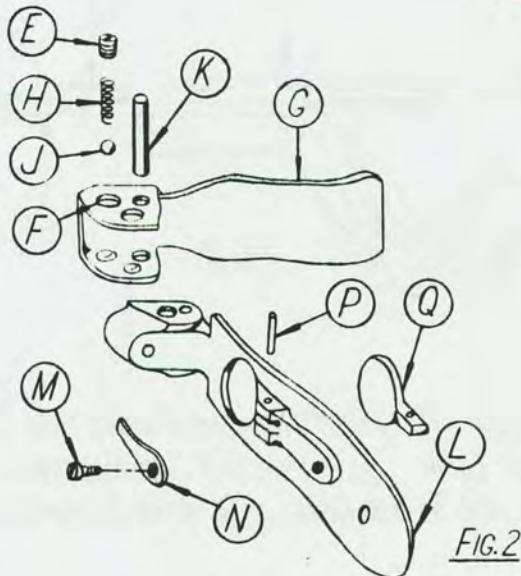
23 TO DISMANTLE BOLT AND BOLT LOCK GROUP F, FIRST REMOVE FIRING PIN G. PUNCH OUT PIN H AND REMOVE BOLT LINK J. PLACE A SCREWDRIVER UNDER LIP OF EXTRACTOR K AND PRY OUTWARD AND TO THE REAR. REMOVE EXTRACTOR SPRING L.

REMOVAL OF BUTT PLATE

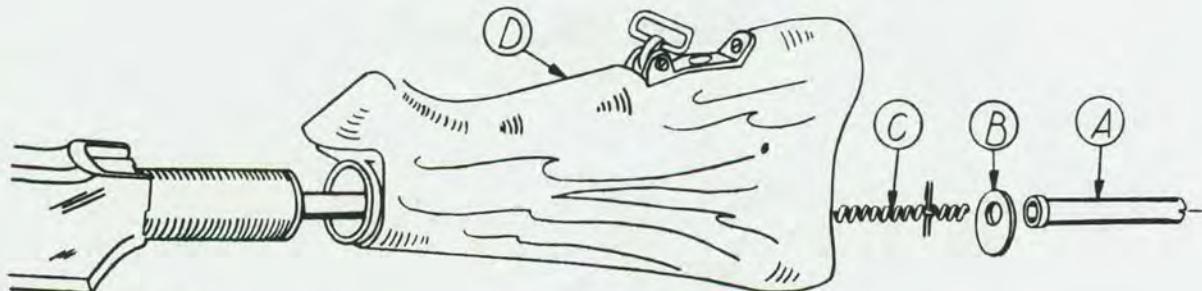
(24) EXTRACT SCREWS (A) AND (B), FIG. 1,  
AND REMOVE BUTT PLATE (C)  
FROM STOCK (D).

DISMANTLING OF BUTT PLATE

(25) REMOVE SCREW (E), FIG. 2, THROUGH HOLE (F).  
TURN OVER BODY (G) AND ALLOW SPRING (H)  
AND BALL (J) TO FALL INTO THE HAND.



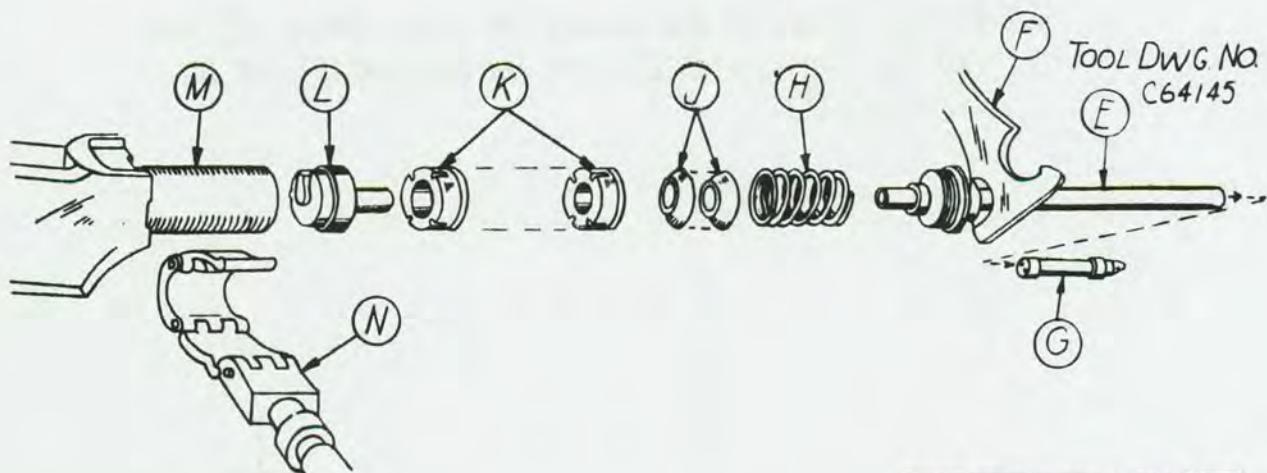
(26) DRIVE OUT PIN (P) AND SEPARATE BODY (G)  
AND PLATE (L). REMOVE SCREW (M) AND  
SPRING (N). DRIVE OUT PIN (P) AND  
REMOVE TRAP (Q).

DISMANTLING OF BUFFER ASSEMBLY

(27) UNSCREW RETAINING SLEEVE **A**, FIG. 1. REMOVE WASHER **B** AND DRAW OUT SPRING **C**. PULL OFF STOCK **D**.

(28) UNSCREW ACTUATOR TUBE **E** WITH TOOL **F**, FIG. 2. SLIDE ACTUATOR **G** OUT OF TUBE **E**. EXTRACT SPRING **H**; FOUR CONES **I** AND FOUR CUPS **K** AND HEAD ASSEMBLY **L**.

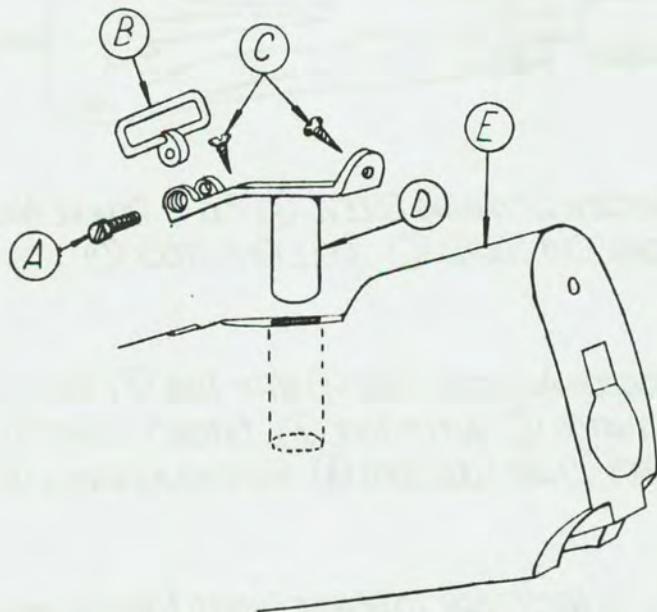
(29) IF IT IS NECESSARY TO REMOVE BUFFER TUBE **M** UNSCREW IT WITH A WRENCH **N**.



SMALL ARMS  
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## DISMANTLING

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DISMANTLING OF SWIVEL

(30)

EXTRACT SCREW **A** AND REMOVE THE SLING SWIVEL **B**. TAKE OUT THE TWO SCREWS **C**. LIFT THE BUSHING **D**. OUT OF THE STOCK **E**.

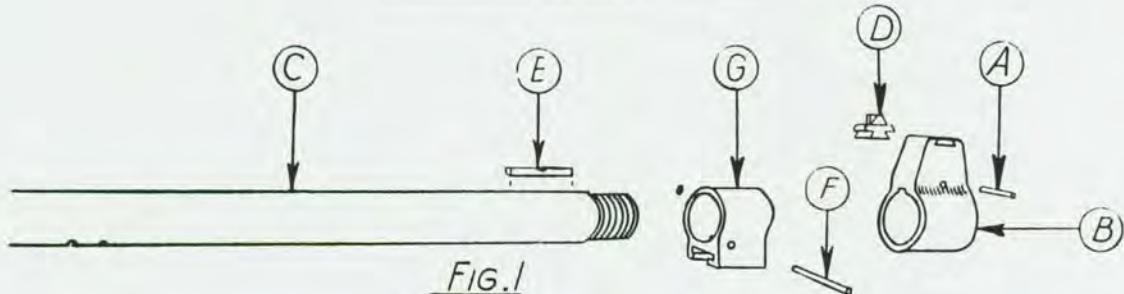
SMALL ARMS  
RIFLE AUTO  
CAL.30  
BROWNING  
M1918 A2

## DISMANTLING

SHEET

13  
OF 13

## DISMANTLING OF BARREL

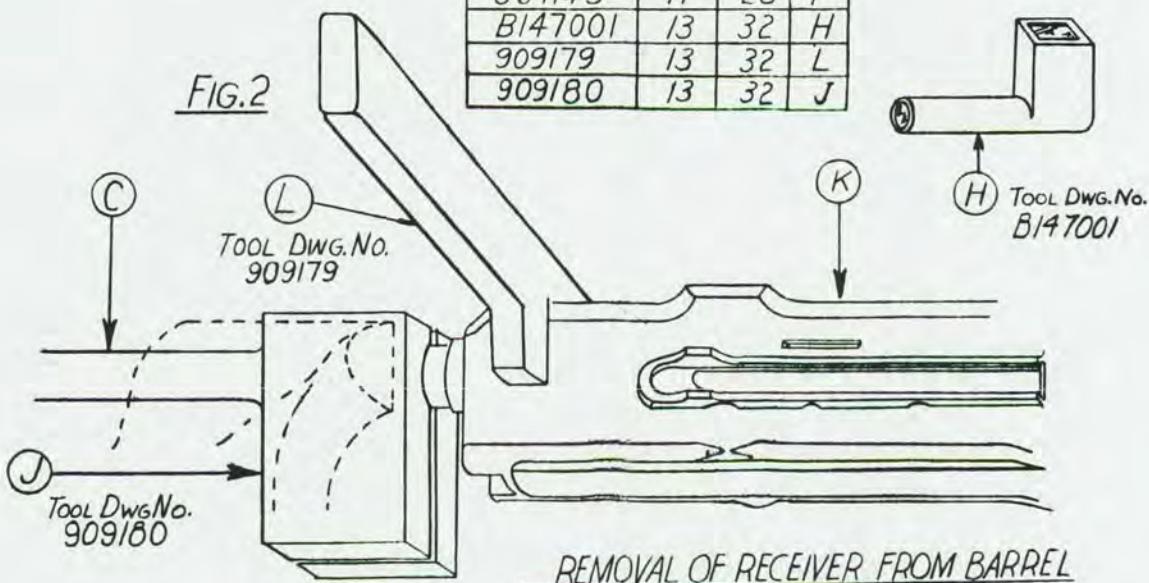


31 DRIVE OUT PIN (A), USING PIN PUNCH. TAP FRONT SIGHT BRACKET (B) FROM BARREL (C). TAP SIGHT (D) OUT OF BRACKET (B). REMOVE KEY (E) FROM BARREL. DRIVE OUT PIN (F), USING A PIN PUNCH. TAP BRACKET (G) FROM BARREL.

## TOOLS REQUIRED

TOOL DWG. NO.	SHEET	OPER.	DET.
C64145	11	28	F
B147001	13	32	H
909179	13	32	L
909180	13	32	J

FIG.2



32 INSERT TOOL (H) INTO BARREL FROM RECEIVER END AND INSPECT BARREL (C) FOR STRAIGHTNESS. CHECK BARREL FOR RUST, PITS AND BURRS. IF IT IS NECESSARY TO REPLACE THE BARREL, PLACE BARREL (C) IN FIXTURE (J). CLAMP FIXTURE (J) IN A VISE SHOWN BY DOTTED LINES. UNSCREW RECEIVER (K) FROM BARREL USING WRENCH (L).

ORDNANCE FIELD SERVICE

## BASE SHOP DATA



# Rifle, Auto., Cal. .30, Browning M1918A2

PREPARED UNDER THE DIRECTION OF THE  
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ROCK ISLAND ARSENAL, FEB., 1943

B.S.D. No.

Assembly

2

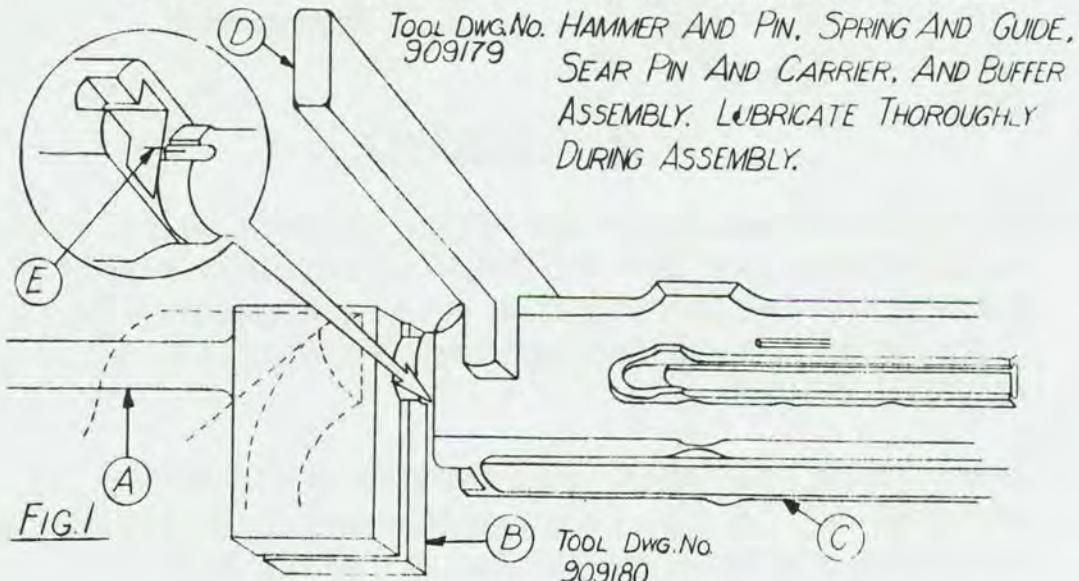
SMALL ARMS  
RIFLE, AUTO.  
CAL. 30  
BROWNING  
M1918A2

## ASSEMBLING

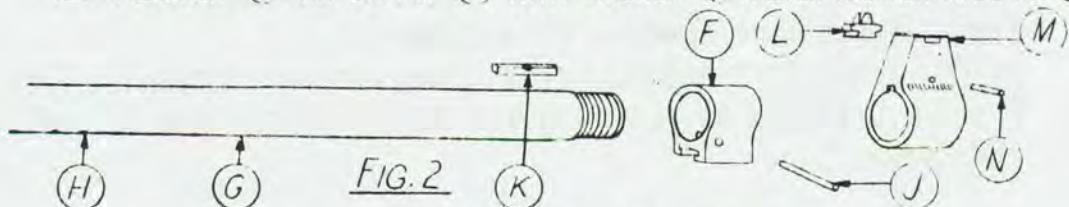
SHEET

/ OF 20

NOTE: CLEAN ALL PARTS IN SOLVENT SOLUTION AND DRY. EXAMINE EACH PART THOROUGHLY. REPLACE ANY PART EXCESSIVELY WORN OR BROKEN. BLACK-PENETRATE ALL METAL PARTS EXCEPT THE BOLT AND BOLT LINK, THE SLIDE AND PISTON ROD AND PIN, THE CONNECTOR SIGHT LEAF.

ASSEMBLY OF RECEIVER TO BARREL

1 PLACE BARREL (A) IN FIXTURE (B). CLAMP FIXTURE (B) IN A VISE. SCREW RECEIVER (C) ON BARREL (A) WITH WRENCH (D). ALIGN LOCATION LINES AT E.

ASSEMBLY OF BARREL

2 SLIDE BRACKET (F) ON BARREL (G) UNTIL GAS HOLE (H) IS ALIGNED WITH GAS HOLE IN BOTTOM OF BRACKET (F). TAP IN PIN (J).

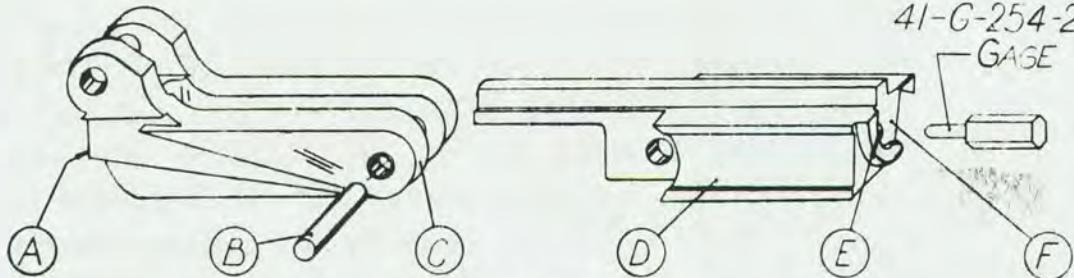
3 INSERT KEY (K) IN BARREL (G). TAP SIGHT (L) IN SIGHT BASE (M). TAP SIGHT BASE (M) ON BARREL (G) UNTIL PIN (N) CAN BE DRIVEN THROUGH BRACKET (M) AND KEY (K).

BAR. 30-M1918A2-ASSEM.-1(20)

SMALL ARMS  
RIFLE, AUTO  
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## ASSEMBLING

SHEET

2  
OF 20

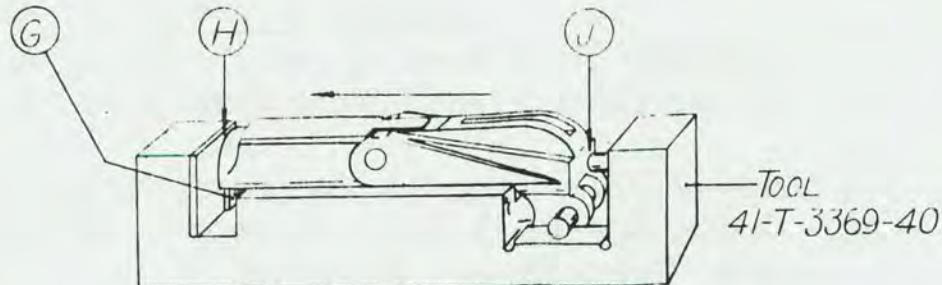
BOLT ASSEMBLY

41-G-254-295  
GAGE

④ BOLT ① IS UNSERVICEABLE IF FACE AT ⑤ IS SET BACK, THAT IS, SHOWS RECESSIVE WEAR, OR IF GAGE 41-G-254-295 ENTERS FIRING PIN HOLE ⑤. CHECK BOLT FOR EXCESSIVE SIDE PLAY AND LOOSENESS WITH BOLT LOCK. CHECK THE BOLT LOCK ② FOR EXCESSIVE LOOSENESS ON PIN ③ OR RECESSIVE WEAR AT ④.

⑤ CHECK THE BOLT ASSEMBLY (BOLT AND BOLT LOCK) INSIDE THE TOOL 41-T-3369-40. HOLD BOLT ASSEMBLY FORWARD AGAINST PAD ⑥. SPACE AT ⑦ SHOULD BE BETWEEN .010" AND .012". (SPACE AT ⑧ SHOULD BE BETWEEN .010" AND .014.") NEW OR SERVICEABLE BOLT ① MAY OFTEN BE FITTED TO OLD BOLT LOCK ②, OR VICE VERSA, TO FORM A SERVICEABLE BOLT ASSEMBLY. BOLT ASSEMBLY IS HELD TOGETHER BY PIN ③ WHICH IS SLIGHTLY PEENED AT BOTH ENDS. ASSEMBLE THE BOLT AND BOLT LOCK SELECTIVELY UNTIL SERVICEABLE COMBINATION IS OBTAINED.

NOTE: IF THE BOLT AND BOLT LOCK COMBINATION IS TOO LONG, GRIND THE OVER-ALL LENGTH AS INSTRUCTED ON NEXT SHEET, IF THE EQUIPMENT IS AVAILABLE.

TOOL  
41-T-3369-40

BAR 30 M1918A2 ASSEM-220

\*REPLACES SHEET 2, B.S.D. UNIT NO. 2, ISSUE OF 3-5-43

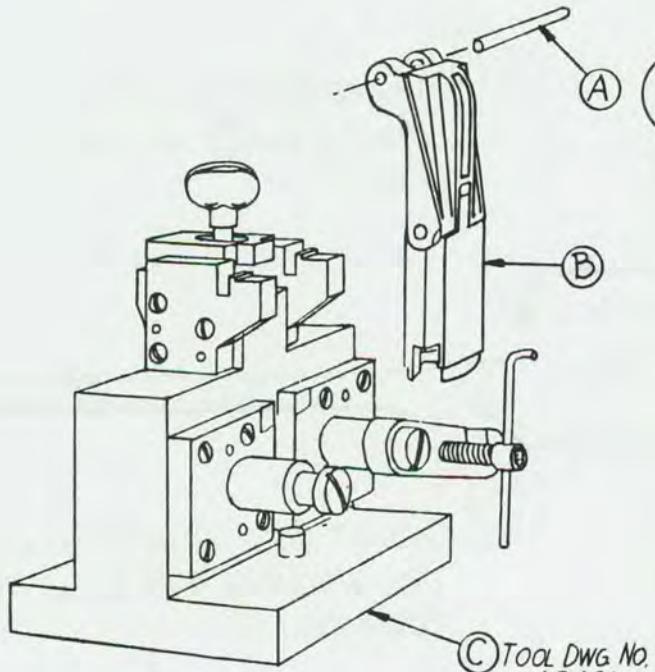


FIG. 1

⑥ PLACE PIN (A) IN THE BOLT AND BOLT LOCK ASSEMBLY (B) AS INDICATED. INSERT THE ASSEMBLY (B) IN FIXTURE (C).

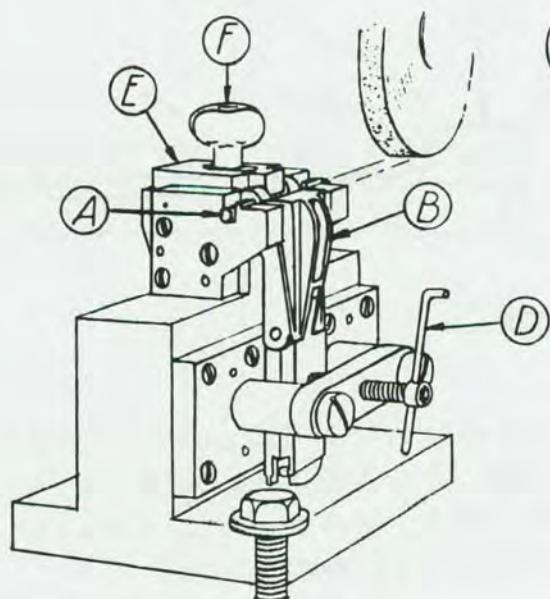


FIG. 2

⑦ IT IS IMPORTANT TO SECURE THE ASSEMBLY (B), FIG. 2, WITH THE SCREW (D) FIRST. THEN PLACE PLATE (E) ON PIN (A) AS SHOWN AND SECURE WITH THUMB SCREW (F). GRIND OFF ONLY ENOUGH FOR BOLT ASSEMBLY (B) TO BE CORRECT, ACCORDING TO OPERATION 5.

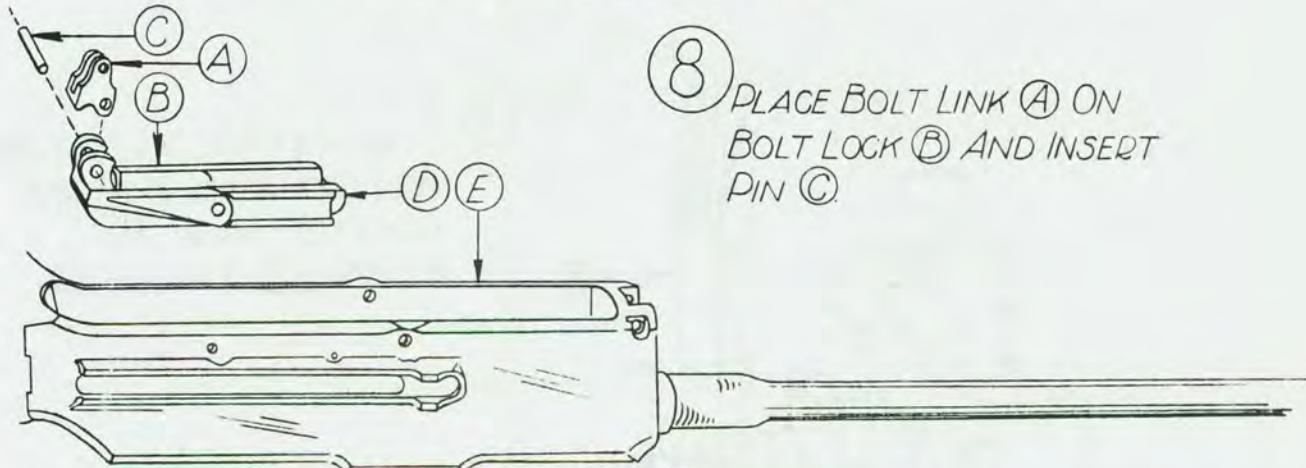
ASSEMBLY FOR INSPECTION

FIG. 1

⑧ PLACE BOLT LINK (A) ON BOLT LOCK (B) AND INSERT PIN (C).

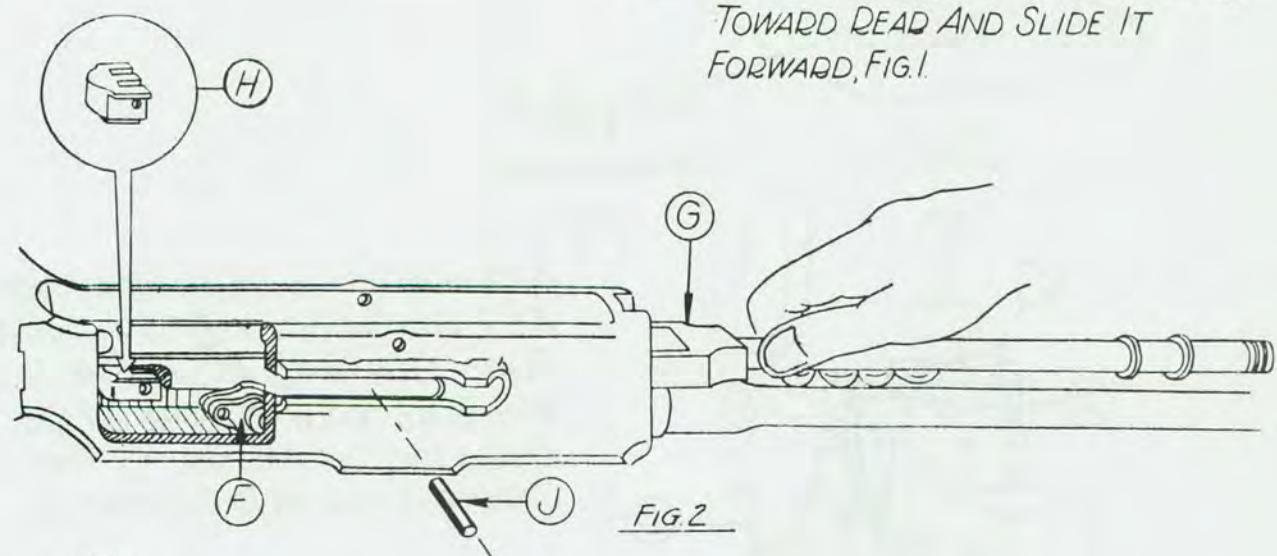


FIG. 2

⑨ INSERT BOLT (D) INTO RECEIVER (E) TOWARD REAR AND SLIDE IT FORWARD, FIG. 1.

⑩ PRESS DOWN BOLT LINK (F), FIG. 2, AND INSERT OPERATING SLIDE (G). SLIDE HAMMER (H) INTO UNDER SIDE OF OPERATING SLIDE (G). PULL SLIDE (G) FORWARD AND LIFT UP LINK (F) UNTIL PIN (J) CAN BE INSERTED THROUGH SLIDE (G), HAMMER (H) AND LINK (A).

SMALL ARMS  
RIFLE, AUTO.  
CAL. 30  
BROWNING  
M1918A2

## ASSEMBLING

SHEET

5

OF 20

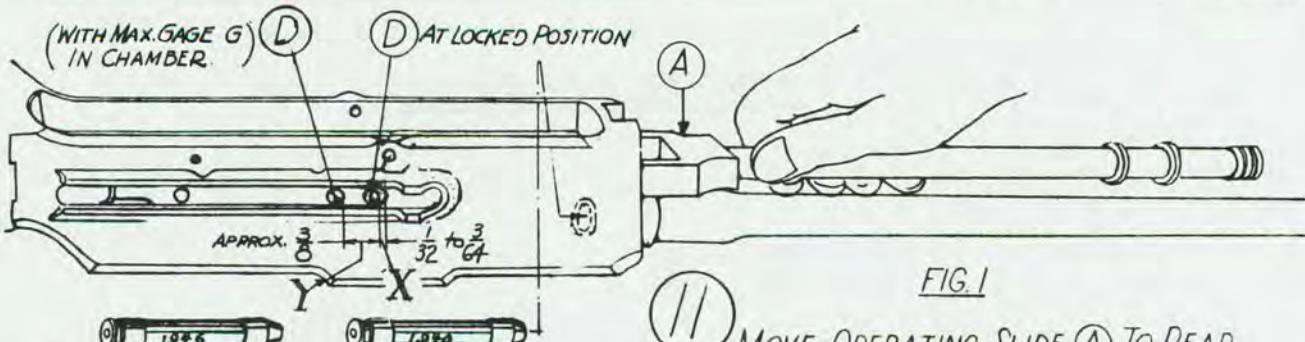


FIG. 1

(WITH MAX. GAGE G)  
IN CHAMBER

D AT LOCKED POSITION

APPROX.  $\frac{3}{8}$  INCH

Y X

G Tool Dwg No. 1.950 USED IN FIELD TOOL  
C7719G (Tool Dwg No-C7719M) Dwg No. C7719A

MOVE OPERATING SLIDE A TO REAR  
TO RETRACT BOLT. INSERT A 1.940" GAGE (B).

IN BARREL AND PULL OPERATING SLIDE A FORWARD. THE BOLT LOCK (C) WILL GO INTO POSITION, FIG. 2. HAMMER PIN (D) SHOULD STAND AT LOCKED POSITION X, FIG. 1. MOVE SLIDE A TO REAR TO RETRACT BOLT (F). PARTS SHOULD SLIDE EASILY. REMOVE GAGE (B).

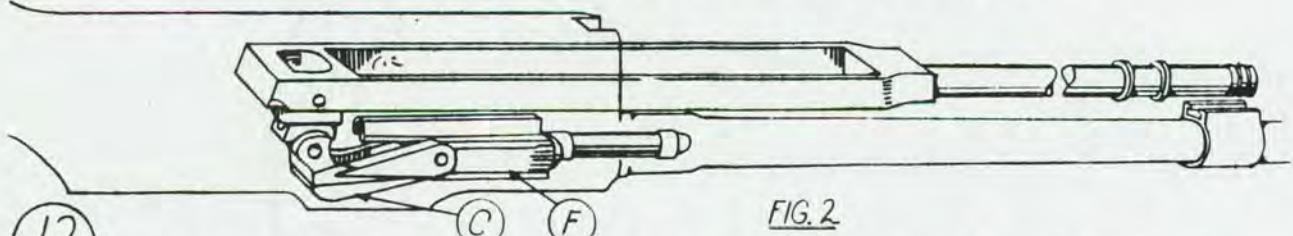


FIG. 2

12 INSERT A 1.946" GAGE (G) AND PULL SLIDE FORWARD. BOLT LOCK (C) SHOULD NOT DROP IN RECESS OF RECEIVER (H), FIG. 3. HAMMER PIN (D) SHOULD NOW STAND A DISTANCE Y (APPROX.  $\frac{3}{8}$  INCH) REARWARD OF ITS LOCKED POSITION X, FIG. 1. WHEN THE HEAD SPACE IS EXCESSIVE DUE TO WORN BOLT, BOLT LOCK, OR WORN RECESS IN RECEIVER, SELECTIVE FITS OF ANY OF THESE PARTS MAY BE TRIED IN AN EFFORT TO COMBINE A UNIT HAVING SATISFACTORY HEAD SPACE. MODIFIED BOLT LOCKS WHICH TAKE AN ADJUSTING PLATE MAY BE USED - SEE FIG. 4. THEY ARE GROUND TO SUIT IN JIG (C), SHEET 3.

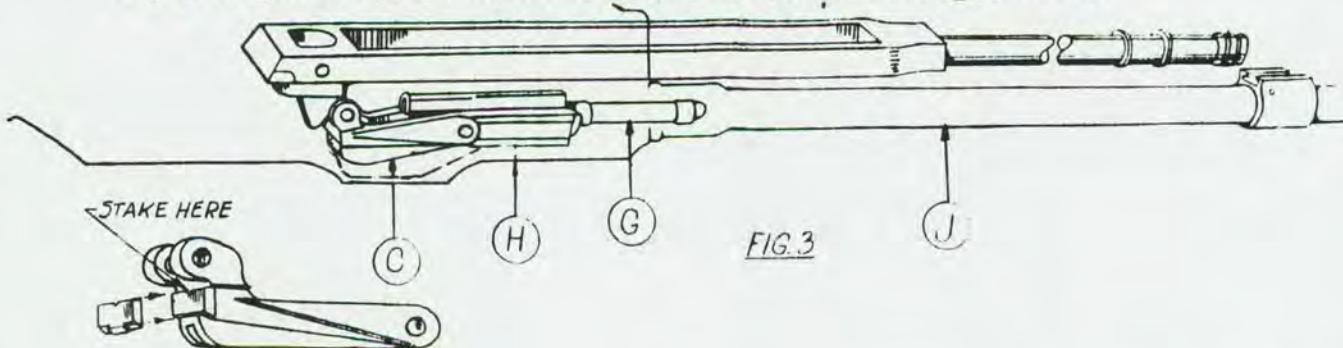
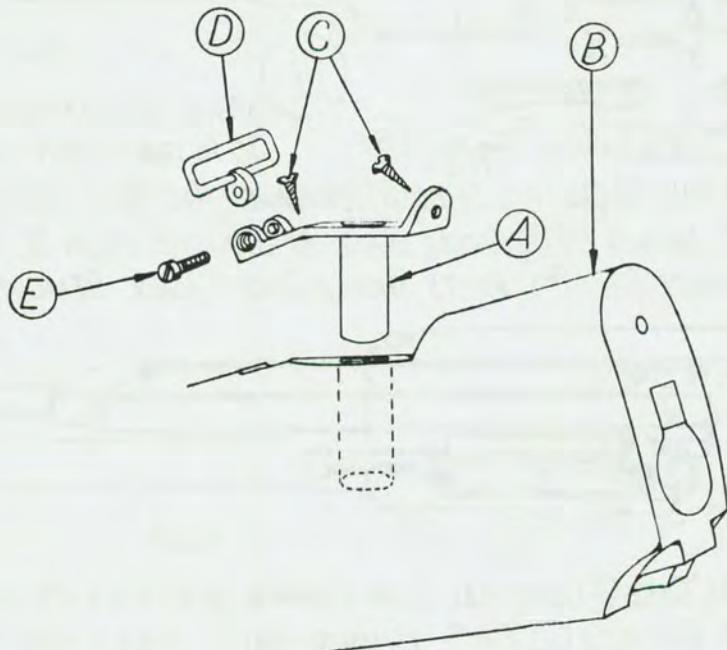


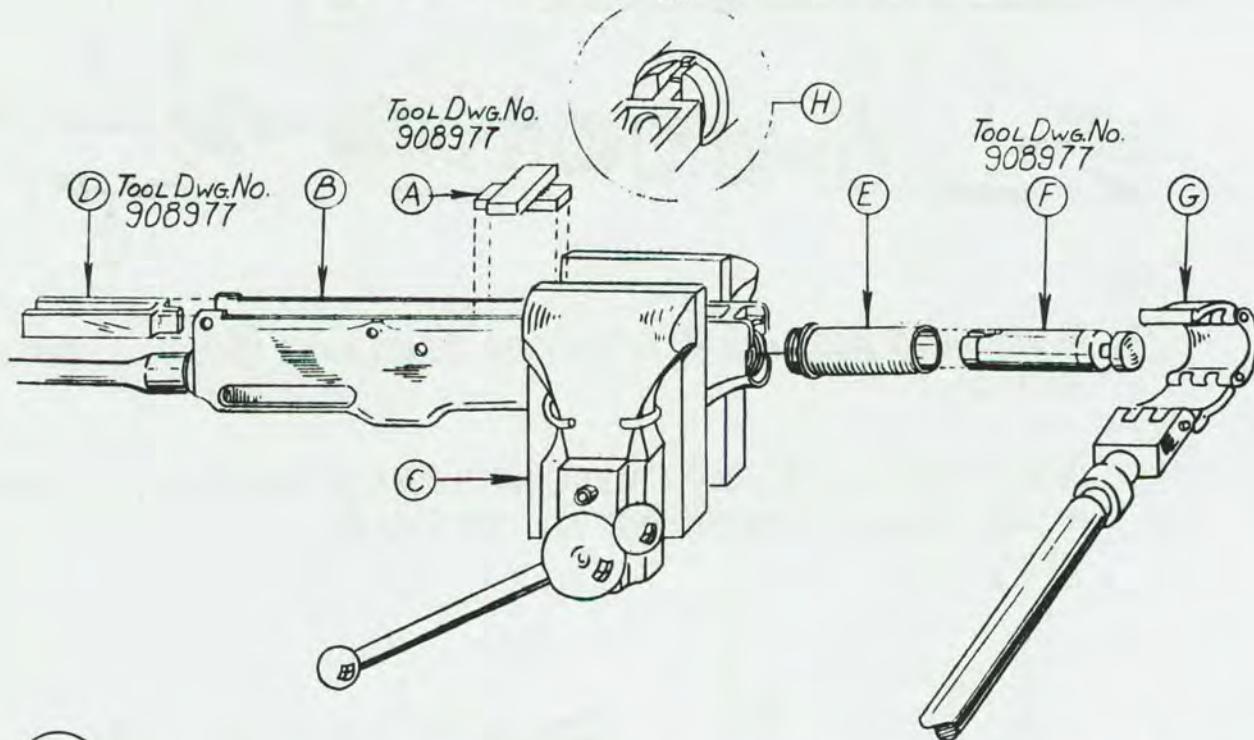
FIG. 3

FIG. 4

BAK 30 M1918A2 ASSEM 520

ASSEMBLY OF SWIVEL

(13) INSERT BUSHING **(A)** INTO POCKET IN STOCK **(B)**  
AS INDICATED. INSTALL SCREWS **(C)**. ATTACH  
SWIVEL **(D)** BETWEEN LUGS WITH SCREW **(E)**

ASSEMBLY OF BUFFER TUBE TO RECEIVER

- (14) PLACE SAFETY FIXTURE **A** IN POSITION IN RECEIVER **B** AS INDICATED. THIS WILL PREVENT SQUEEZING RECEIVER **B** WHEN CLAMPED IN VISE **C**.
- (15) CLAMP RECEIVER IN VISE AS ILLUSTRATED, AND PLACE GAGE **D** IN RECEIVER **B**.
- (16) START BUFFER TUBE **E** INTO RECEIVER **B**. INSERT GAGE **F** INTO BUFFER TUBE **E**. TIGHTEN BUFFER TUBE WITH WRENCH **G** UNTIL GAGE **D** ENGAGES INTO GAGE **F** AS ILLUSTRATED IN INSET **H**. TIGHTEN BUFFER TUBE TO THE TIGHTEST POSSIBLE POSITION AT WHICH THESE GAGES WILL ALIGN.

SMALL ARMS  
RIFLE, AUTO.  
CAL. 30  
BROWNING  
M1918A2

## ASSEMBLING

SHEET

8

OF 20

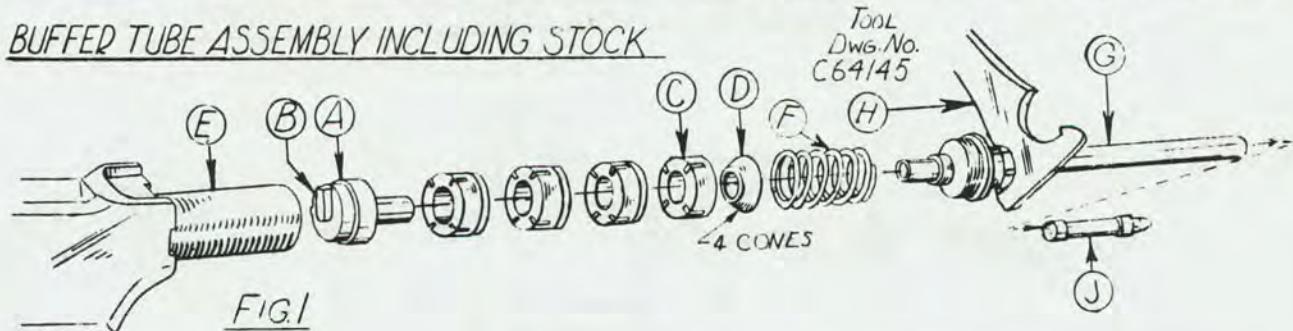
BUFFER TUBE ASSEMBLY INCLUDING STOCK

FIG.1

(17) PLACE HEAD ASSEMBLY (A) IN POSITION SO RELEASE (B) IS IN A VERTICAL POSITION.

(18) INSERT FOUR CUPS (C), FOUR CONES (D) INTO BUFFER TUBE (E) AS ILLUSTRATED IN FIG.1. PLACE SPRING (F) INTO BUFFER TUBE (E).

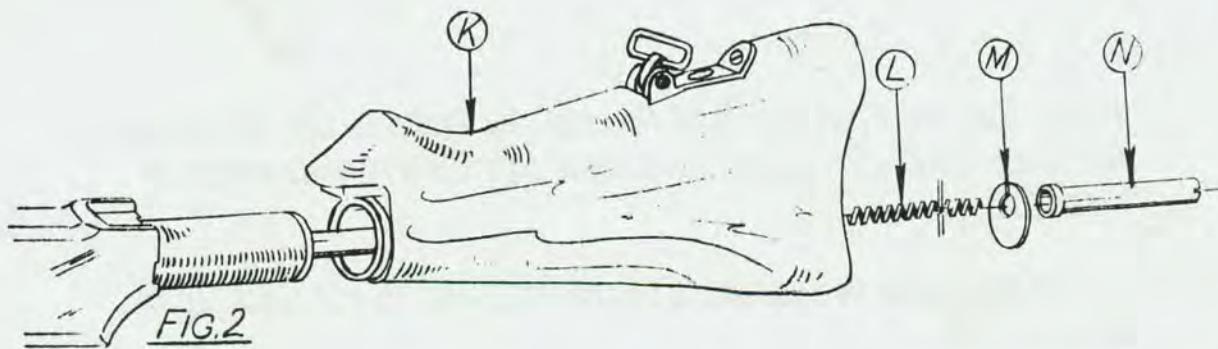


FIG.2

(19) SCREW ACTUATOR TUBE (G) INTO BUFFER TUBE (E) WITH TOOL (H). DIP ACTUATOR (J) INTO LIGHT MACHINE OIL AND INSERT IT INTO ACTUATOR TUBE (G), FLAT END FIRST.

(20) PLACE STOCK (K) IN POSITION. INSERT ACTUATOR SPRING (L) INTO ACTUATOR TUBE (G). PLACE LOCK WASHER (M) IN STOCK (K) AND SECURE STOCK (K) IN POSITION WITH RETAINING SLEEVE (N).

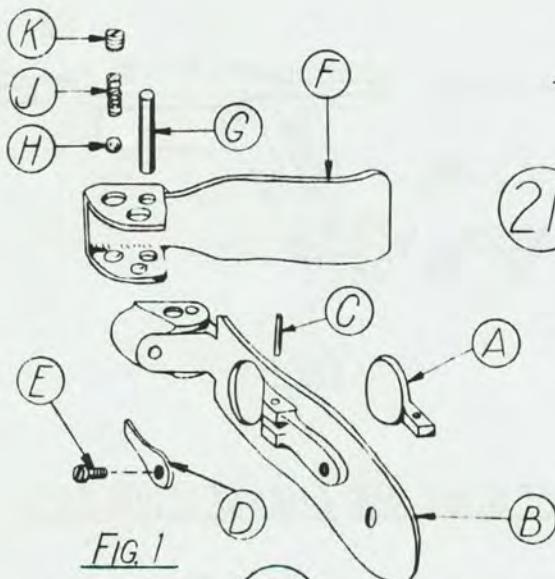
SMALL ARMS  
RIFLE AUTO  
CAL. 30  
BROWNING  
M 1918 A2

## ASSEMBLING

SHEET

9

OF 20

ASSEMBLY OF BUTT PLATE

(21)

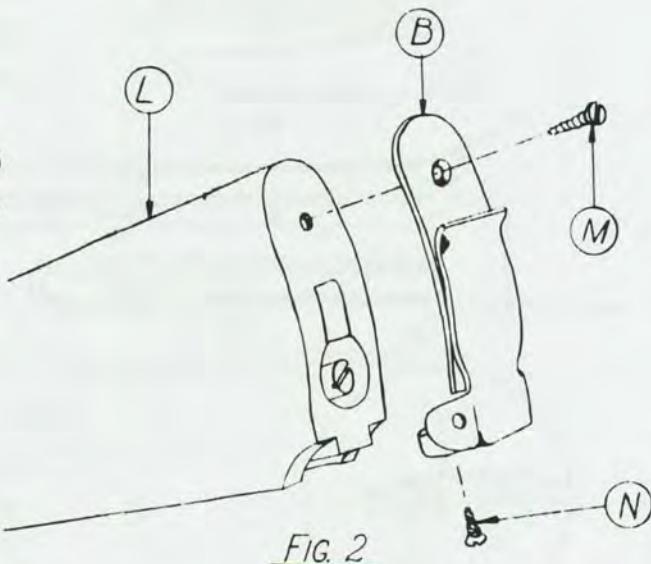
INSTALL TRAP **A** IN PLATE **B** WITH PIN **C**. SECURE TRAP SPRING **D** IN POSITION WITH SCREW **E**.

(22)

PLACE BODY **F** ON PLATE **B** AND HINGE WITH PIN **G**. INSERT BALL **H** AND SPRING **J**. INSTALL SCREW **K**, SCREWING IT DOWN UNTIL BODY **F** PASSES OVER IT FREELY.

(23)

ATTACH ASSEMBLED PLATE **B** TO BUTT STOCK **L** WITH TWO SCREWS **M** AND **N**.



BAR-30-M1918A2-ASSEM-9(20)

SMALL ARMS  
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## ASSEMBLING

SHEET  
10  
OF 20

## ASSEMBLY OF BOLT GROUP

(24)

PLACE SPRING (A) IN ITS SEAT IN EXTRACTOR (B) AS SHOWN. INSERT EXTRACTOR INTO BOLT (C). LIFT OUT SO LUG ON EXTRACTOR CAN SEAT IN BOLT. PLACE LINK (D) IN POSITION AND PUSH PIN (E). INSERT FIRING PIN (F).

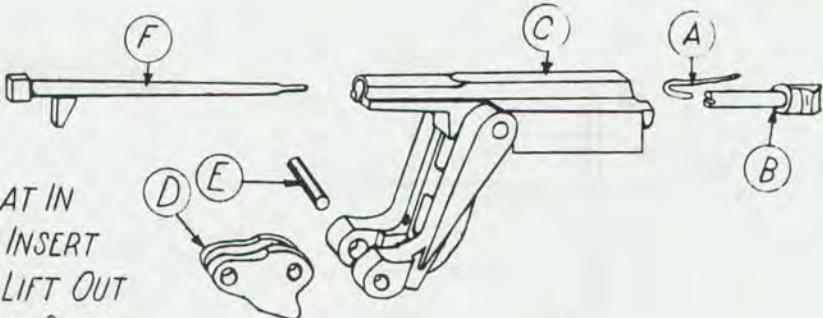


FIG. 1

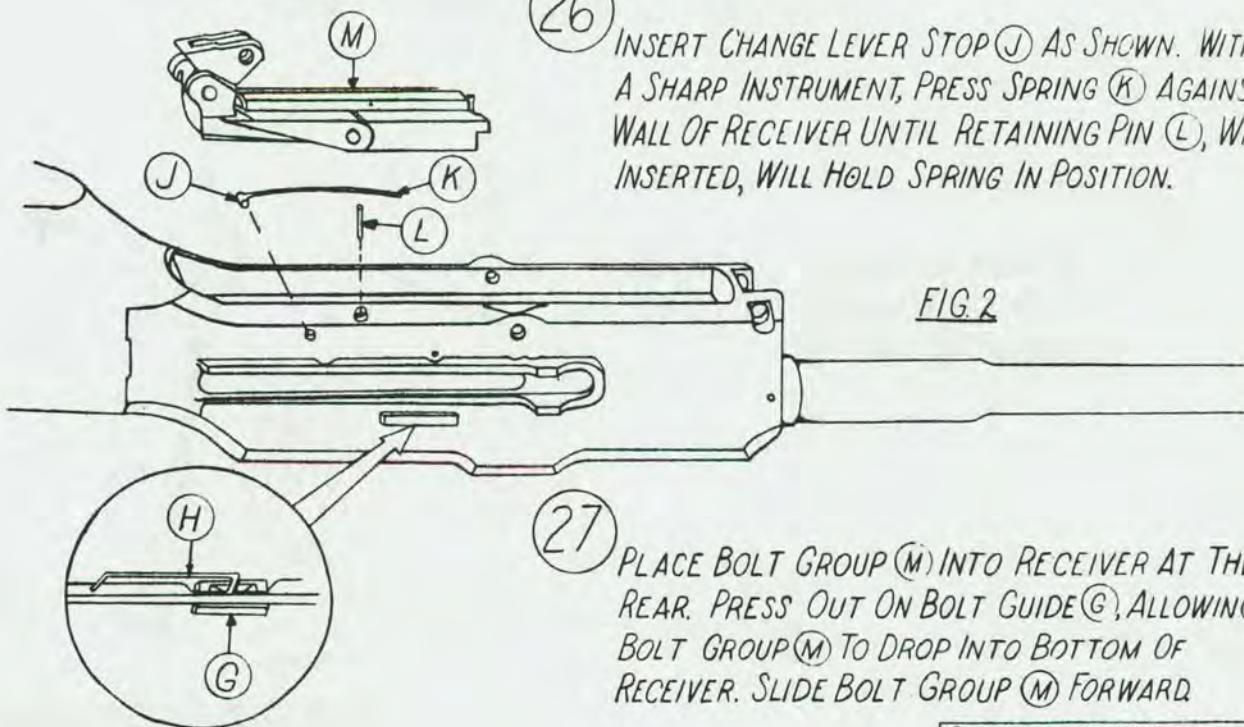
## INSTALLATION OF BOLT GROUP, BOLT GUIDE AND CHANGE LEVER STOP

(25)

INSERT BOLT GUIDE (G) IN HOUSING. SLIDE LONG END OF SPRING (H) IN HOLE FOR SAME, INSIDE OF RECEIVER. PRESSING AGAINST OUTSIDE OF BOLT GUIDE (G) AND USING SCREWDRIVER ON SPRING (H), FORCE THE SMALL END OF SPRING (H) IN ITS SEAT IN BOLT GUIDE (G).

(26)

INSERT CHANGE LEVER STOP (J) AS SHOWN. WITH A SHARP INSTRUMENT, PRESS SPRING (K) AGAINST WALL OF RECEIVER UNTIL RETAINING PIN (L), WHEN INSERTED, WILL HOLD SPRING IN POSITION.



(27)

PLACE BOLT GROUP (M) INTO RECEIVER AT THE REAR. PRESS OUT ON BOLT GUIDE (G), ALLOWING BOLT GROUP (M) TO DROP INTO BOTTOM OF RECEIVER. SLIDE BOLT GROUP (M) FORWARD

BAR-30-M1918A2-ASSEM 1020

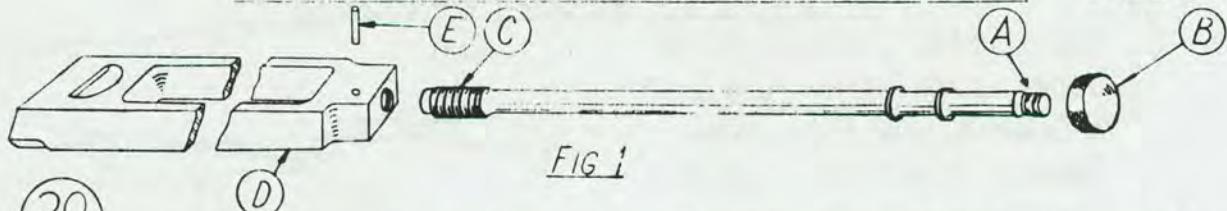
ASSEMBLY OF SLIDE AND OPERATING HANDLE

FIG 1

(28)

TRY PISTON (A), FIG 1, IN THE RING GAGE (B). OPEN END OF GAGE HAS 0.494" INCH DIAMETER. IF PISTON ENTERS GAGE, IT IS NOT SERVICEABLE. REPLACE WITH NEW PISTON.

SCREW PISTON ROD (C) INTO SLIDE (D) AS FAR AS POSSIBLE BY HAND. UNSCREW ROD (C) TWO COMPLETE REVOLUTIONS AND TAP IN PIN (E).

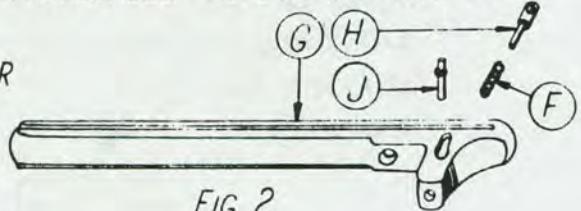


FIG 2

(29)

INSERT SPRING (F) IN OPERATING HANDLE (G), FIG. 2. WITH COUNTERSUNK SIDE OF HOLE UPWARD, INSERT PLUNGER (H), DEPRESSING SPRING (F) UNTIL PIN (J) CAN BE INSERTED.

INSTALLATION OF OPERATING HANDLE, SLIDE AND HAMMER

(30)

SLIDE OPERATING HANDLE (G), FIG 3, INTO RECEIVER TO FORWARD POSITION. INSERT SLIDE (K) FROM FRONT OF RECEIVER, SLIDING IT TO REAR. SLIDE HAMMER (L) INTO SLIDE (K). PULL SLIDE (K) FORWARD AND ALIGN HOLES (M) IN BOLT LINK WITH HOLES IN HAMMER (L) AND HOLE IN RECEIVER. INSERT PIN (N) AND PUSH IT IN UNTIL IT CLEARS THE WALL OF RECEIVER.

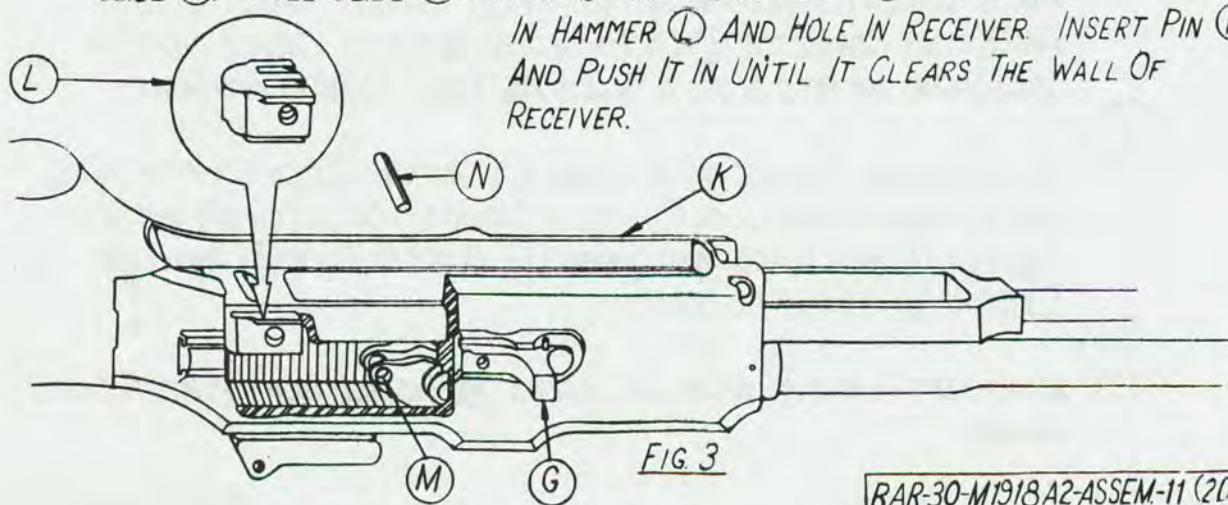


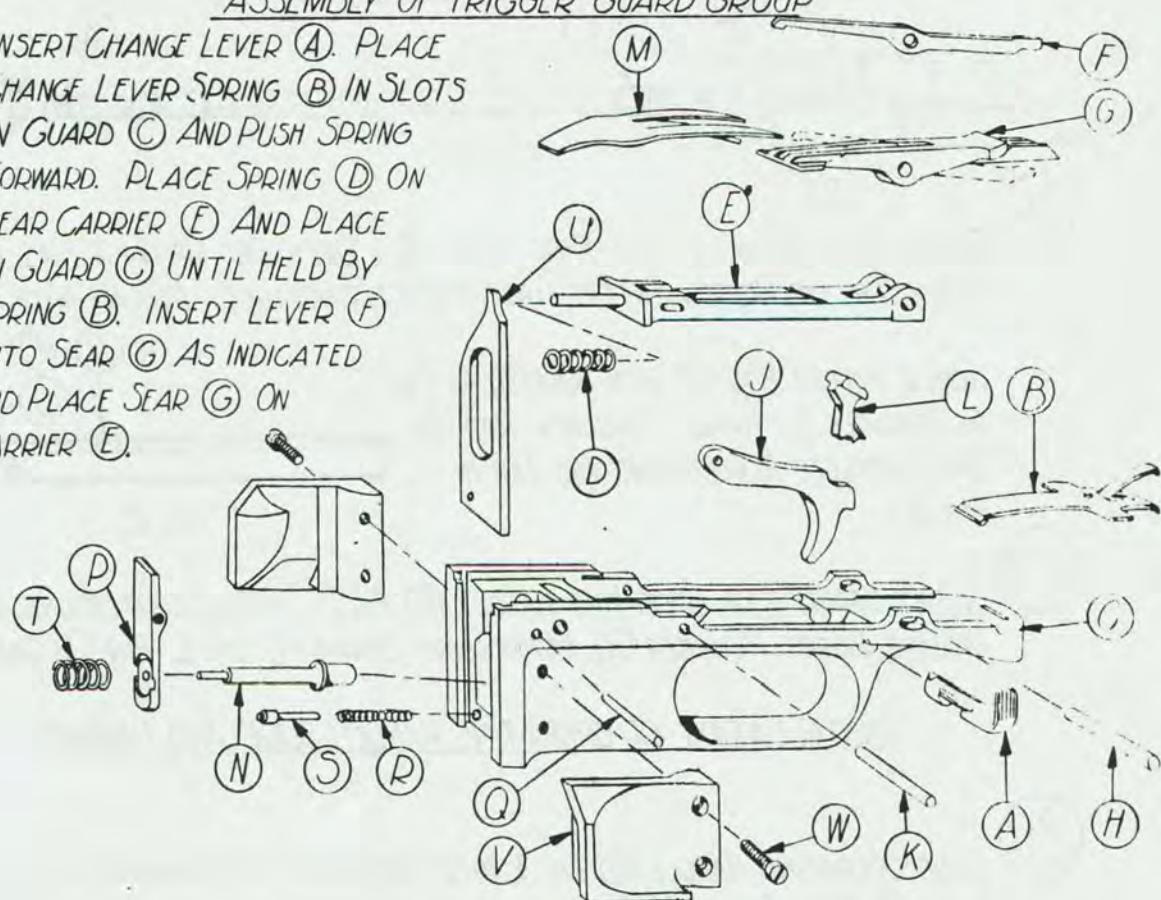
FIG. 3

BAR-30-M1918A2-ASSEM-11 (20)

(31)

ASSEMBLY OF TRIGGER GUARD GROUP

INSERT CHANGE LEVER **A**. PLACE CHANGE LEVER SPRING **B** IN SLOTS IN GUARD **C** AND PUSH SPRING FORWARD. PLACE SPRING **D** ON SEAR CARRIER **E** AND PLACE IN GUARD **C** UNTIL HELD BY SPRING **B**. INSERT LEVER **F** INTO SEAR **G** AS INDICATED AND PLACE SEAR **G** ON CARRIER **E**.



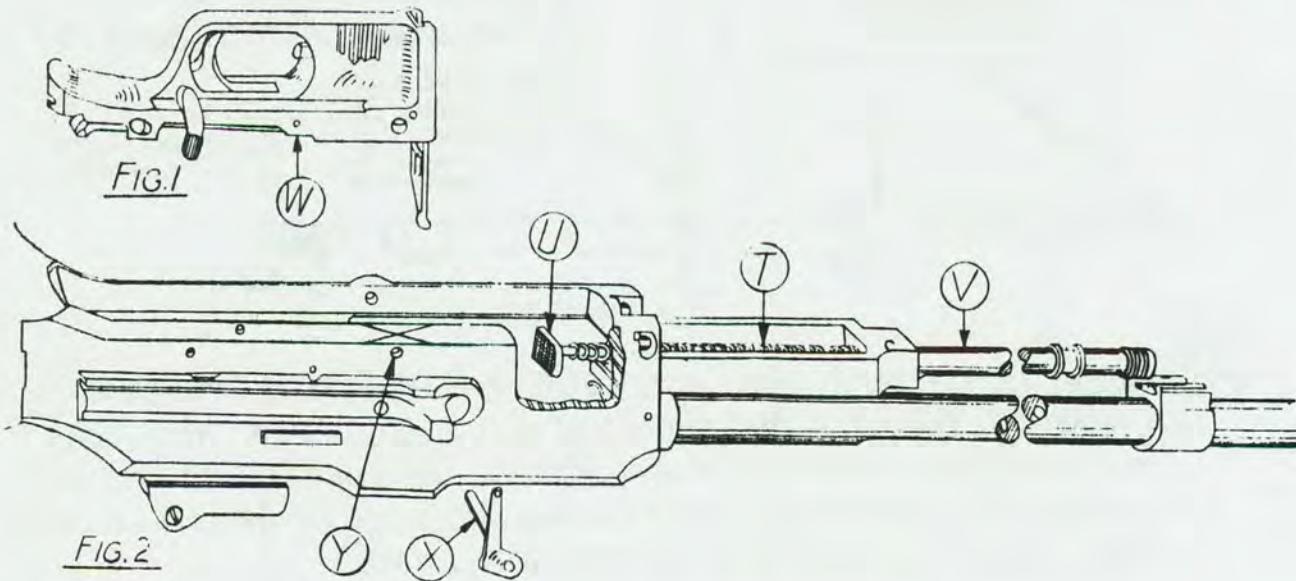
PRESS CARRIER FORWARD AND INSTALL PIN **H**. INSTALL TRIGGER **J** WITH PIN **K**. SET CONNECTOR **L** ON TRIGGER AS INDICATED. ENGAGE SIDES OF SEAR SPRING **M** INTO SLOTS IN GUARD AND PRESS FORWARD AND DOWN.

(32)

SLIDE MAGAZINE RELEASE **N** IN GUARD **C**. INSTALL CATCH **P** WITH PIN **Q**. INSERT SPRING **R** AND LOCK **S**. HOLD SPRING **T** ON CATCH **P** AND SLIDE EJECTOR **U** INTO GUARD OVER SPRING **T**. DEPRESS LOCK **S** AND SLIDE EJECTOR **U** DOWN UNTIL LOCKED.

(33)

INSTALL LEFT PLATE **V** WITH TWO SCREWS **W**. INSTALL RIGHT PLATE IN SAME MANNER.

INSTALLATION OF SPRING, GUIDE AND TRIGGER GUARD GROUP

34) MEASURE SPRING  $\textcircled{T}$ . IT SHOULD BE 15 INCHES LONG, FREE HEIGHT. REPLACE IF NECESSARY.

35) INSERT THE SPRING AND GUIDE  $\textcircled{U}$  THROUGH THE RECEIVER INTO THE PISTON ROD  $\textcircled{V}$ . COMPRESS SPRING  $\textcircled{T}$  BY PUSHING IN GUIDE  $\textcircled{U}$  UNTIL GUIDE CAN BE TURNED 90° AND PROPERLY SEATED.

36) PLACE TRIGGER GUARD  $\textcircled{W}$  INTO RECEIVER AND INSERT PIN  $\textcircled{X}$  AT  $\textcircled{Y}$ . TURN PIN  $\textcircled{X}$  90° IN A COUNTER-CLOCKWISE DIRECTION UNTIL PROPERLY SEATED.

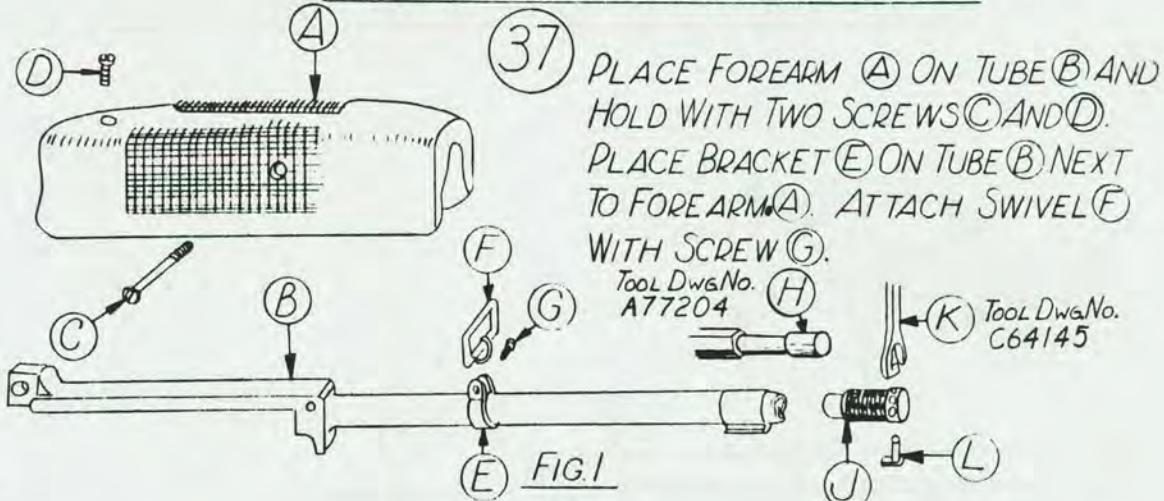
SMALL ARMS  
RIFLE, AUTO.  
CAL 30  
BROWNING  
M1918A2

## ASSEMBLING

SHEET  
14

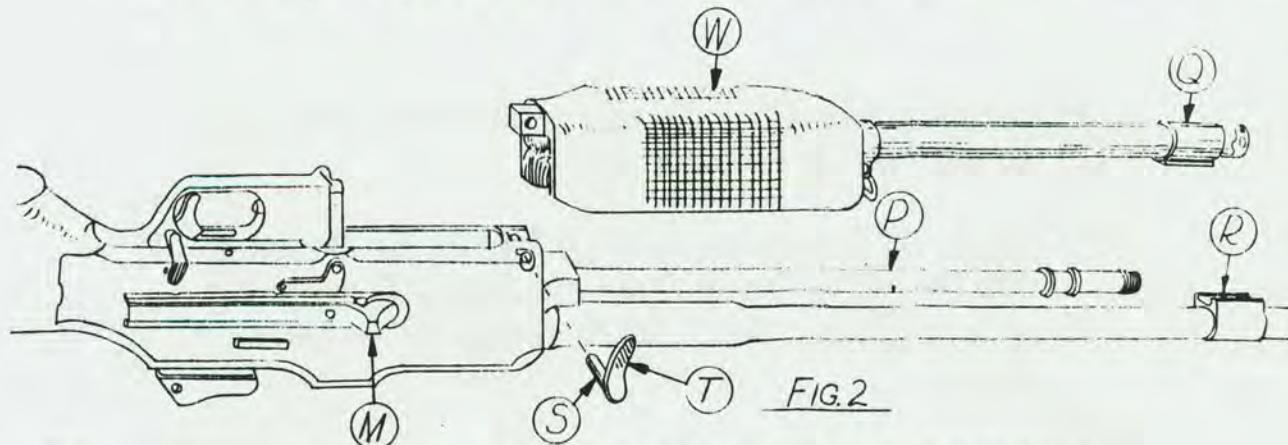
OF 20

## ASSEMBLY OF FOREARM AND TUBE



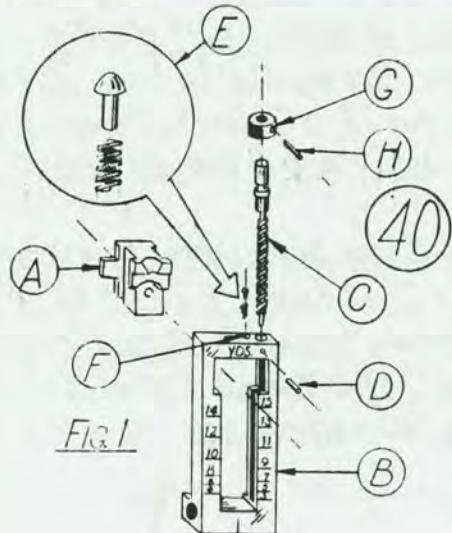
37 PLACE FOREARM (A) ON TUBE (B) AND HOLD WITH TWO SCREWS (C) AND (D). PLACE BRACKET (E) ON TUBE (B) NEXT TO FOREARM (A). ATTACH SWIVEL (F) WITH SCREW (G).  
Tool Dwg No. A77204  
Tool Dwg No. C64145

38 INSERT PLUG GAGE (H) INTO CYLINDER (J). IF PLUG ENTERS CYLINDER, THE CYLINDER IS OVERRSIZE AND SHOULD BE REPLACED. SCREW CYLINDER (J) INTO TUBE (B) WITH COMBINATION TOOL (K) UNTIL SHOULDER OF GAS CYLINDER IS ABOUT ONE TURN FROM CORRESPONDING SHOULDER OF THE GAS CYLINDER TUBE. LOCK CYLINDER (J) IN POSITION WITH LOCK (L).



39 INSTALLATION OF GAS CYLINDER ASSEMBLY  
COCK THE GUN BY RETRACTING OPERATING HANDLE (M) AND RETURNING IT TO FORWARD POSITION. SLIDE GAS CYLINDER ASSEMBLY (J) OVER PISTON ROD (P) BEING SURE MALE BRACKET (Q) ENGAGES FEMALE BRACKET (R). INSERT PIN (S) AND TURN SPRING (T) 180° COUNTER-CLOCKWISE UNTIL IT IS SEATED IN RECEIVER.

[BAR 30 M1918A2 ASSEMBLY(20)]

ASSEMBLY OF REAR SIGHT

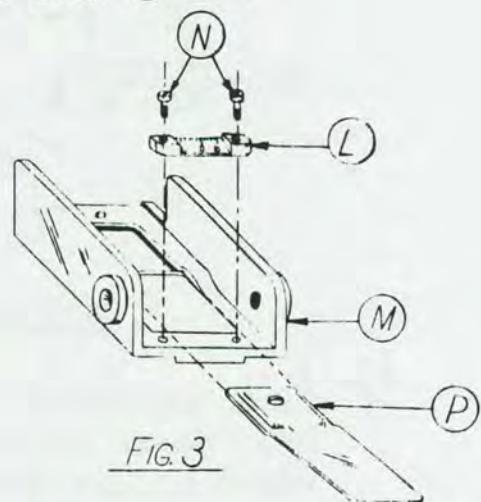
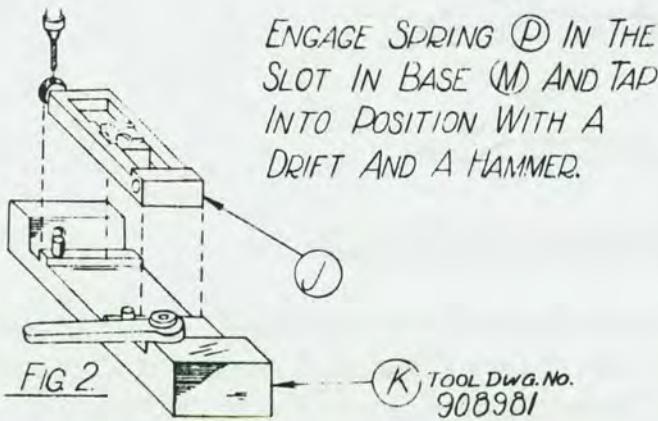
PLACE SLITE (A), FIG. 1, IN POSITION IN LEAF (B) AND SCREW ELEVATING SCREW (C) INTO LEAF (B). SECURE ELEVATING SCREW (C) WITH PIN (D). DROP SPRING AND PLUNGER (E) INTO HOLE (F) AND PLACE KNOB (G) ON ELEVATING SCREW (C). ALIGN THE TWO HOLES AND TAP PIN (H) INTO POSITION.

(41)

IF A NEW ELEVATING SCREW (C) IS USED, IT WILL BE NECESSARY TO PLACE ASSEMBLED LEAF (J), FIG. 2, IN FIXTURE (K) AND DRILL A HOLE IN ELEVATING SCREW (C) TO ACCOMMODATE PIN (H).

(42)

SECURE WINDAGE SCALE (D), FIG. 3, TO BASE (M) WITH TWO SCREWS (N).



SMALL ARMS  
RIFLE, AUTO.  
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M1918A2

## ASSEMBLING

SHEET

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OF 20

## (43) ASSEMBLY OF REAR SIGHT (CONTD)

PLACE LEAF ASSEMBLY (A) ON BASE (B), FIG. 1.

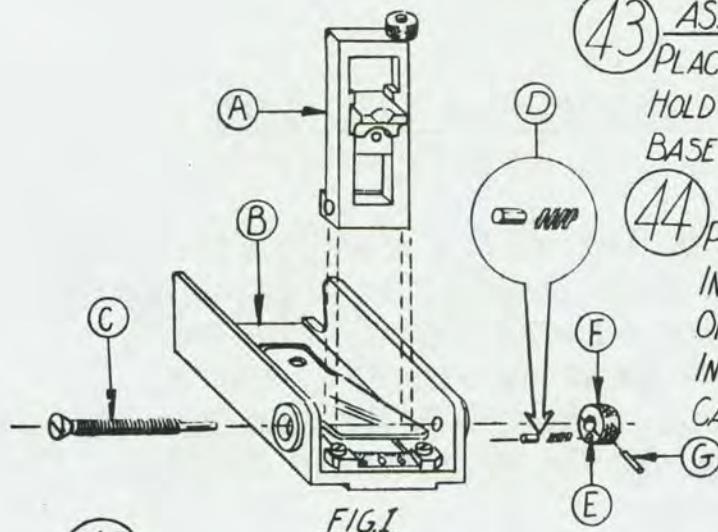
HOLD THE LEAF (A) IN CORRECT ALIGNMENT WITH  
BASE (B) AND SCREW IN WINDAGE SCREW (C).

FIG. 1

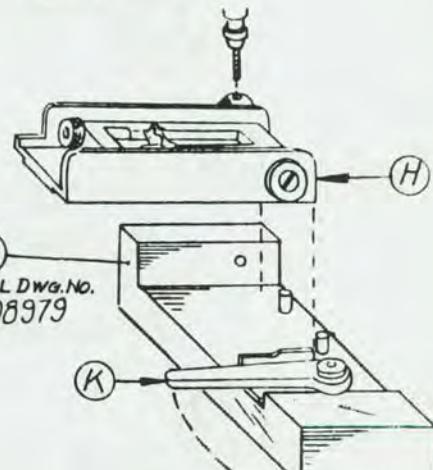
(44) PLACE SPRING AND PLUNGER (D) IN POSITION  
IN HOLE (E) OF KNOB (F). PLACE KNOB (F)  
ON WINDAGE SCREW (C). ALIGN THE HOLES  
IN KNOB (F) AND WINDAGE SCREW (C) SO PIN (G)  
CAN BE TAPPED INTO PLACE.

FIG. 2

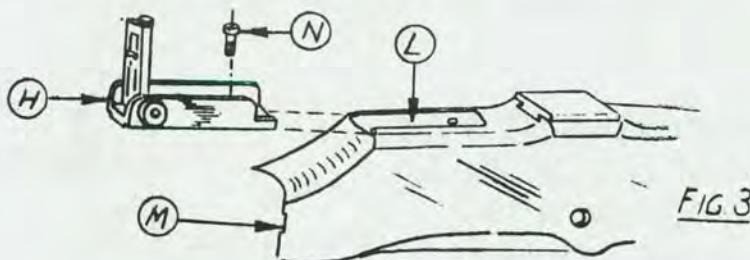


FIG. 3

ASSEMBLY OF REAR SIGHT TO GUN(47) ENGAGE REAR SIGHT (H), FIG. 3, INTO KEYWAY (L) ON RECEIVER (M). TAP REAR SIGHT  
WITH A HAMMER AND A BRASS FLATTER UNTIL CORRECT ALIGNMENT IS ACQUIRED,  
PERMITTING SCREW (N) TO BE SCREWED THROUGH SIGHT (H) INTO RECEIVER (M).

SMALL ARMS  
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BROWNING  
M1918A2

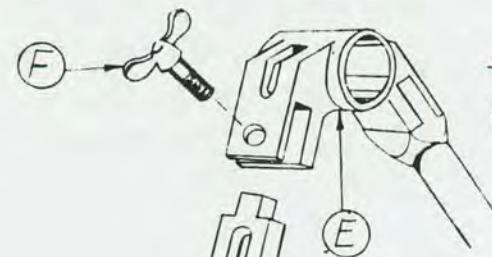
## ASSEMBLING

SHEET  
17  
OF 20

## ASSEMBLY OF BIPOD

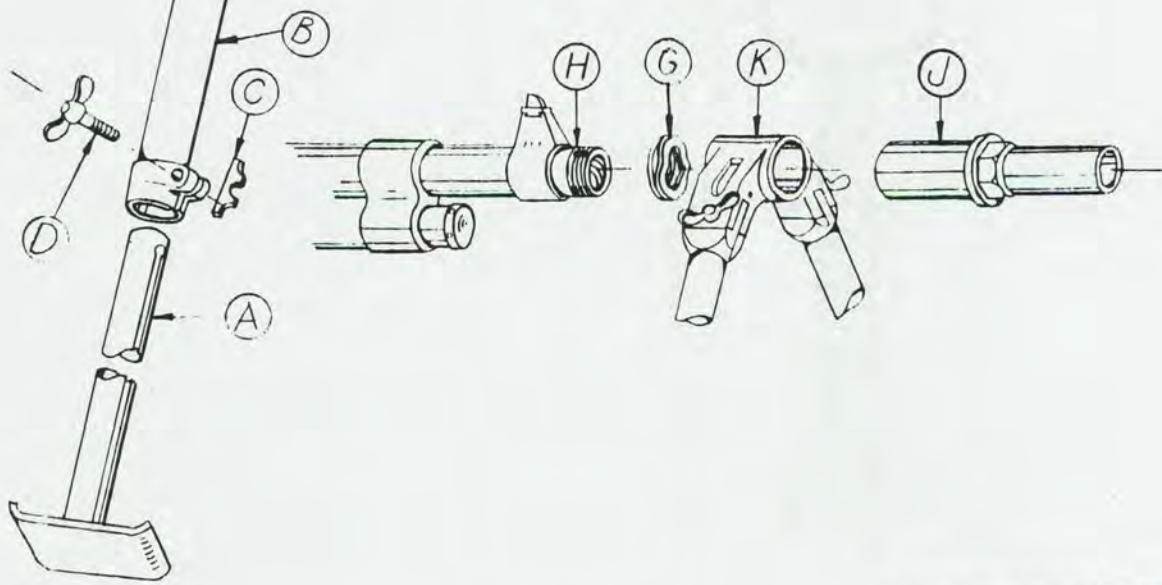
(48) SLIDE LEG (A) INTO TUBE (B). ALIGN THE KEYWAYS IN LEG (A) AND TUBE (B). INSERT KEY (C) INTO THE KEYWAY AND APPLY SCREW (D), SECURING LEG (A) IN PLACE.

(49) PLACE TUBE (B) IN POSITION IN BODY (E) AND SECURE WITH SCREW (F).



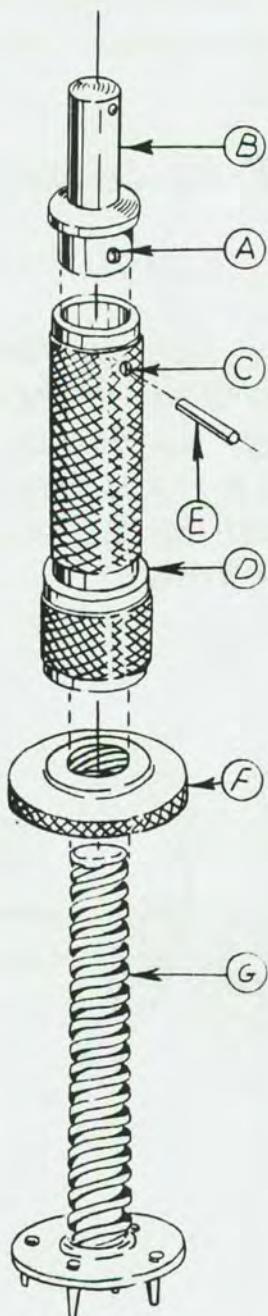
## ASSEMBLY OF BIPOD TO RIFLE

(50) SLIDE FRICTION WASHER (G) ONTO BARREL (H). INSERT FLASH HIDER (J) THROUGH BIPOD (K). SCREW FLASH HIDER (J) ONTO BARREL (H), SECURING BIPOD (K) IN POSITION.



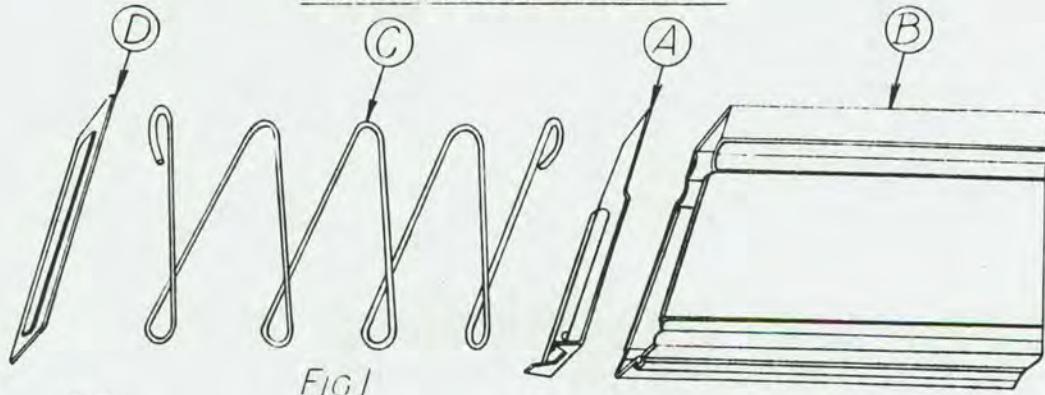
[BAR-30-M1918A2-ASSEM-17(20)]

## ASSEMBLY OF STOCK REST

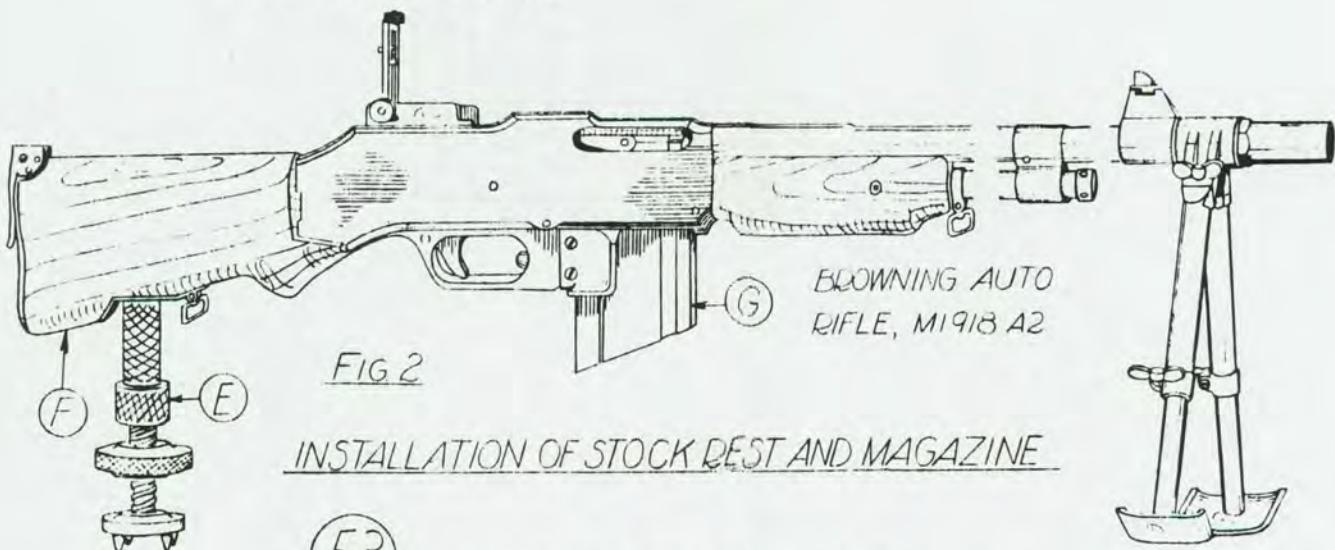


(51)

ALIGN HOLE (A) IN STEM (B)  
AND HOLE (C) IN NUT (D)  
AND TAP PIN (E) INTO PLACE.  
SCREW LOCK (F) ONTO LEG  
(G), AND SCREW NUT (D)  
ONTO LEG (G).

ASSEMBLY OF MAGAZINE

(52) INSERT THE FOLLOWER (A) INTO TUBE (B). COMPRESS SPRING (C) AGAINST FOLLOWER AND SLIDE BASE (D) INTO BOTTOM OF TUBE (B).



(53) INSERT STOCK REST (E) INTO BUSHING IN STOCK (F).

(54) SLIDE MAGAZINE (G) INTO BOTTOM OF RECEIVER, AS SHOWN.

SMALL ARMS
RIFLE, AUTO.
CAL .30
BROWNING
M1918A2

## ASSEMBLING

SHEET
20
OF 20

## TOOLS REQUIRED

TOOL DWG. NO.	SHEET	OPER.	DET.
909180	1	1	B
909179	1	1	D
41-T 3369-40	2	5	
A2401	3	6	C
C7719A	5	11	B
C7719G	5	12	G
C7719M	5		FIG.1
908977	7	14	A
C64145	8	19	H
A77201	11	28	B
A77204	14	38	H
C64145	14	38	K
908981	15	41	K
908979	16	46	J
41-G 254295	2	4	

BAR-30-M1918A2-ASSEM-2000

REPLACES SHEET 20, B.S.D. UNIT NO.2, ISSUE OF 3-5-43

ORDNANCE FIELD SERVICE

## BASE SHOP DATA



# Rifle, Automatic, Cal. .30 Browning, M1918A2

PREPARED UNDER THE DIRECTION OF THE  
CHIEF OF ORDNANCE

ROCK ISLAND ARSENAL - NOV., 1943

B.S.D. No.

Tool Drawings.....

3

A 77201

MARKING:-  
**.30 BAR M16, M18A2 & .30 B.M.R.M.22**  
**C-9073 GAS PISTON**  
**REJECTION RING FOR GAS PISTON**  
**(FIELD SERVICE)**  
**A 77201**      ORD. DEPT. U. S. A.

## REVISIONS

COMPONENT	GAGE	
DRG. NO.	DATE	DATE
C-9073	4-15-38	9-14-38

DRG. PERTAINS TO  
**B 113062**      GAGE LISTS

## SYMBOL

D'FITSMAN <i>FCL</i>	TRACER <i>FCL</i>	L'DG D'FITSMAN <i>2m</i>
CHECKER <i>RAB</i>	CHECKER	CHIEF D'FITSMAN <i>FJ</i>

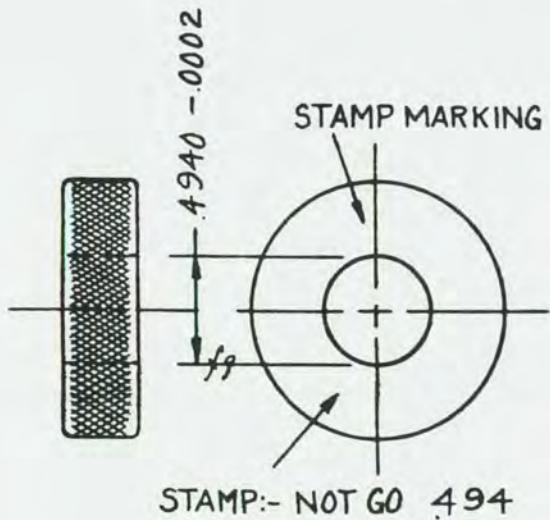
SUBMITTED  
*SAC*      *C S Reed*  
 CAPT. ORD DEPT U. S. A.

APPROVED  
*G. B. Brown*  
 LT. COL, ORD. DEPT. U. S. A.

SPRINGFIELD ARMORY

DATE SEPT. 14, 1938

A 77201



PLAIN RING GAGE  
 AMERICAN GAGE DESIGN STANDARD

HARDEN TO ROCKWELL SCALE C63 MIN

LAP *f*<sub>9</sub> SURFACES  
 REMOVE ALL SHARP EDGES *f*<sub>3A</sub>

SUPERSEDES OLD TRACING SA-5800 UNDER REVISION DATE OF SEPT. 14, 1938.

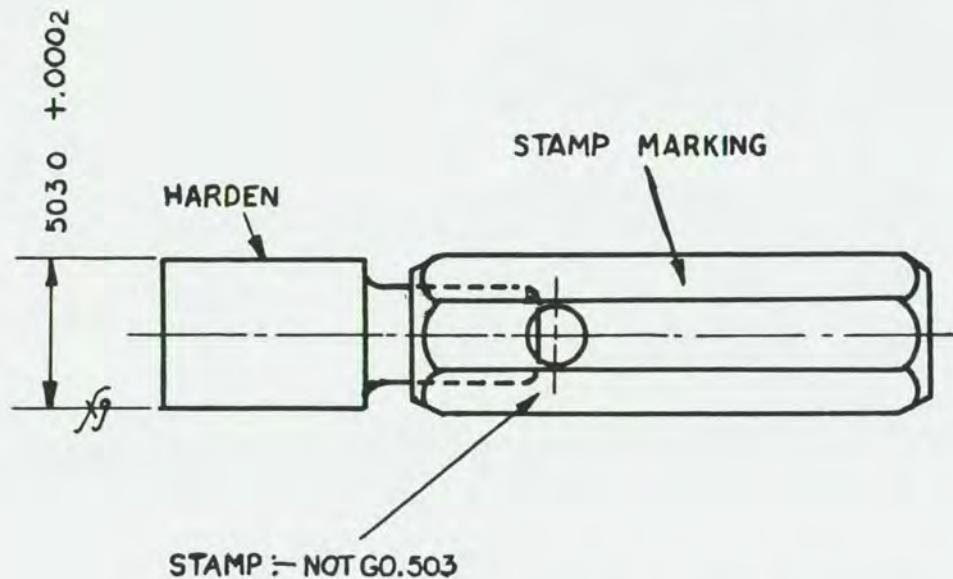
A 77204

MARKING:-  
BRG. AUTO. RIFLE CAL. 30 M1918A2  
C-64296 GAS CYLINDER REJECTION PLUG  
FOR DIA. OF PISTON HOLE (FIELD SERVICE)  
A77204, ORD. DEPT. U.S.A. INSP.

REVISIONS

COMPONENT	GAGE	
DRG. NO.	DATE	DATE
C64296	12-26-40	5-28-41

DRG. PERTAINS TO  
B113062-1 GAGE LISTS



S.E. PLAIN PLUG GAGE  
AMERICAN GAGE DESIGN STANDARD  
USE GO STD. BLANK

ROCKWELL HARDNESS C63 TO 66  
NOT TO SCALE  
LAP  $\frac{1}{16}$  SURFACES  
REMOVE ALL SHARP EDGES 23A

DFTSMAN P.A.R. TRACER P.A.R. L'DEDFTSMAN *ans.*  
CHECKER *ans.* CHECKER *ans.* CHIEF DFTSMAN *ans.*

SUBMITTED  
*R. A. P. Moore*  
CAPT. ORD. DEPT. U.S.A.

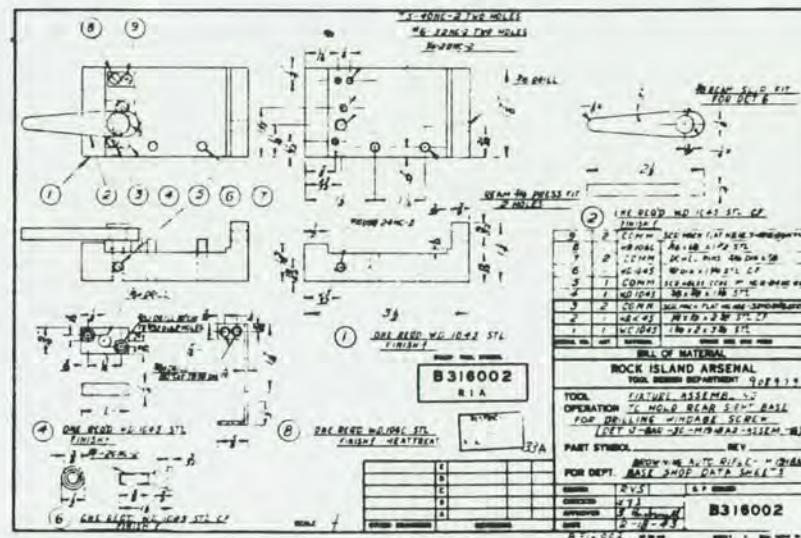
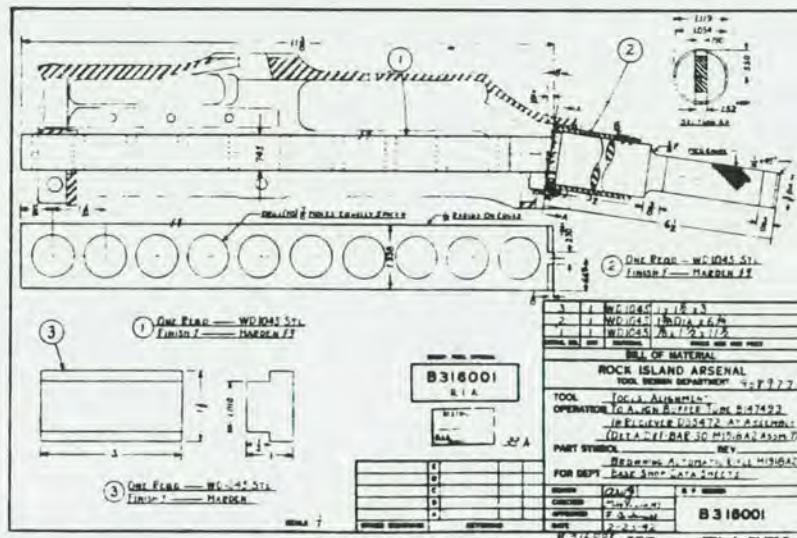
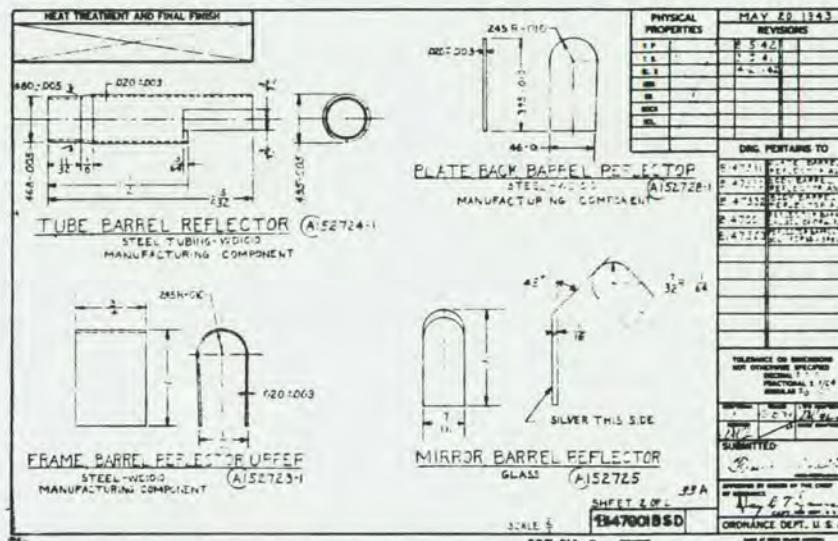
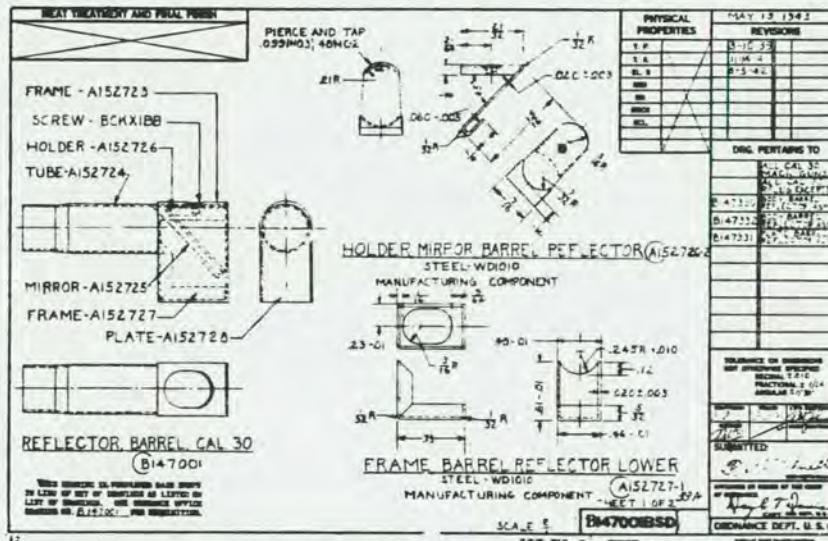
APPROVED:- BY ORDER OF THE  
CHIEF OF ORDNANCE  
*W. J. Moore*

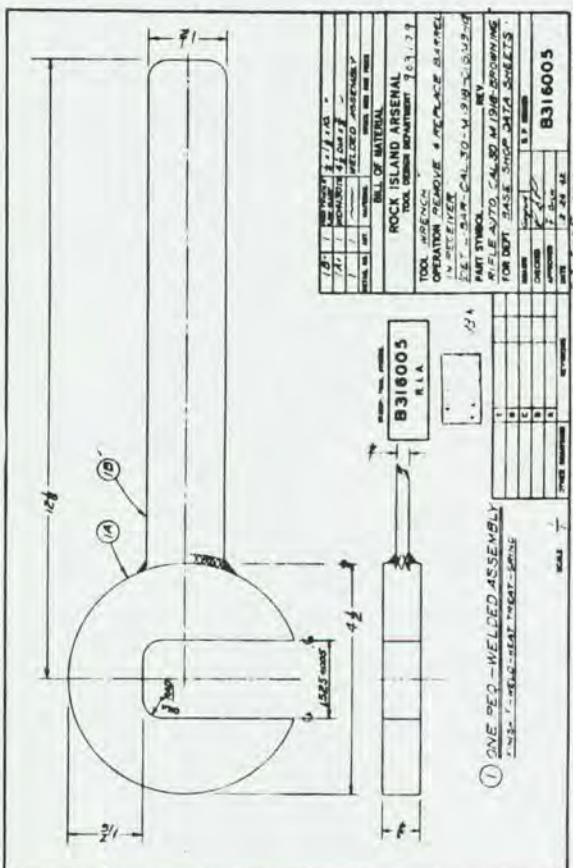
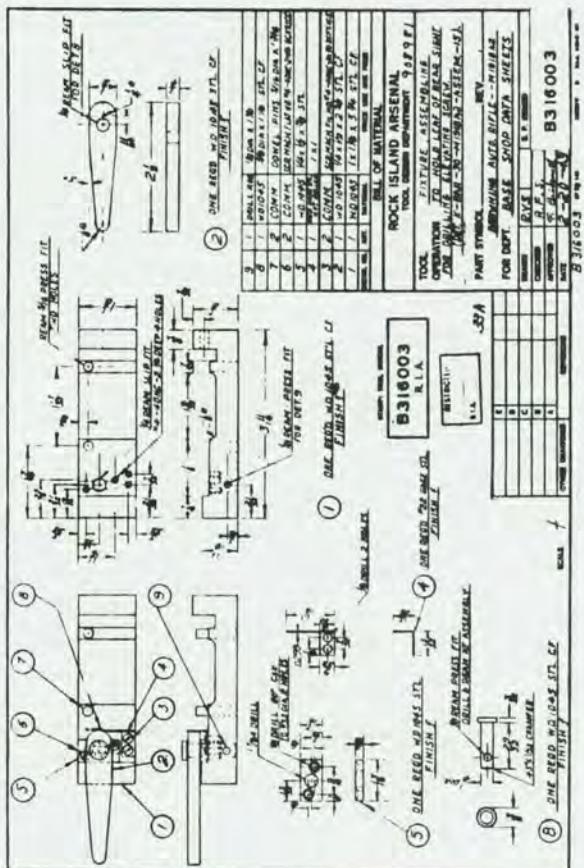
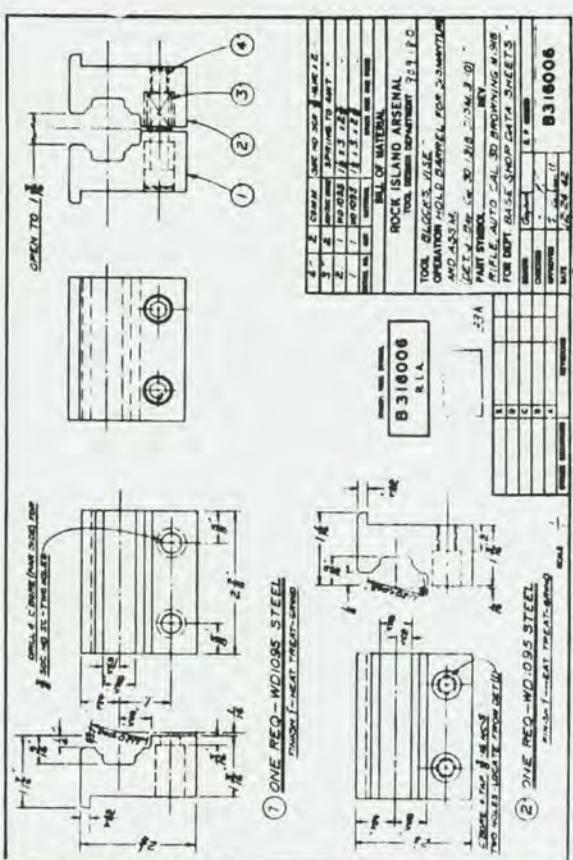
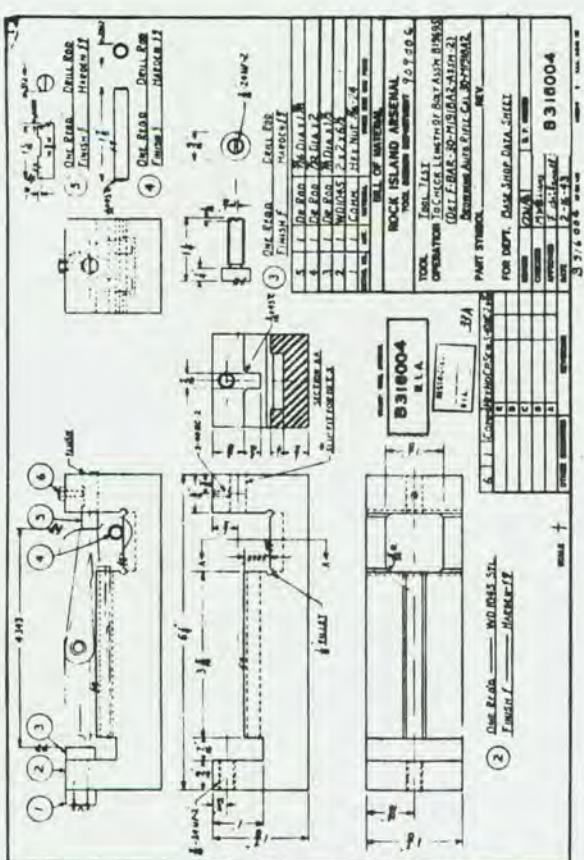
M.A.J., ORD. DEPT. U.S.A.

SPRINGFIELD ARMORY

DATE MAY 28, 1941

A 77204





LINE NUMBER	LIST OF DRAWINGS	DRAWING NUMBER	BREECHING SPACE "B"
1	GAGE, HEADSPACE, CAL. 30		
2		C7719A	2.654
3		C7719B	2.655
4		C7719C	2.656
5		C7719D	2.657
6		C7719E	2.658
7		C7719F	2.659
8		C7719G	2.660
9		C7719H	2.661
10		C7719K	2.662
11		C7719L	2.663
12		C7719M	2.664
13		C7719N	2.665
14		C7719P	2.666
15		C7719Q	2.667
16		C7719R	2.668
17		C7719S	2.669
18			1955

LINE NUMBER	LIST OF SPECIFICATIONS	SPECIFICATION NUMBER	REVISION
1	GAGE, HEADSPACE, CAL. 30		
2	TOOL STEEL CARBON AND ALLOY	57-108	
3			
4			
5			
6			

GAGES 1942 AND 1944 ARE FOR USE IN THE MANUFACTURE OF THE U.S. RIFLE CAL. 30 M1.  
 NOTE: GAGES 1942 AND 1944 ARE FOR USE IN THE MANUFACTURE OF OTHER RIFLES.  
 GAGE 1946 IS FOR USE AS MAX. GAGE IN FINAL INSPECTION OF OVERHAUL RIFLES.  
 GAGE 1951 IS FOR INSPECTION IN THE FIELD AS A HEADSPACE LIMIT FOR SERVICEABLE RIFLES.  
 THE FULL SET OF GAGES TO BE USED IN AMMUNITION AND RIFLE TESTING WHEN HEADSPACING BETWEEN THE PRESCRIBED LIMITS IS DESIRABLE.

TOLERANCE .01 ALLOWED ON ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED.  
 SUPERSEDES OLD TRACING C7719 UNDER REVISION DATE OF MAY 8, 1936

HEAT TREATMENT & FINAL FINISH  
 HEAT TO 1620-1640°F, QUENCH IN WATER  
 TEMPER AT 350°F, ROCKWELL C68-65

HEADSPACE LENGTH "L"

DRAW RIM TO  
 ROCKWELL SCALE  
 C. 50 TO 55

102-010  
 1/16 R. MIN.

1/16 R.  
 1/16 R.

NAME OF MANUFACTURER

ORD. DEPT. U.S.A.

HEADSPACE GAGE

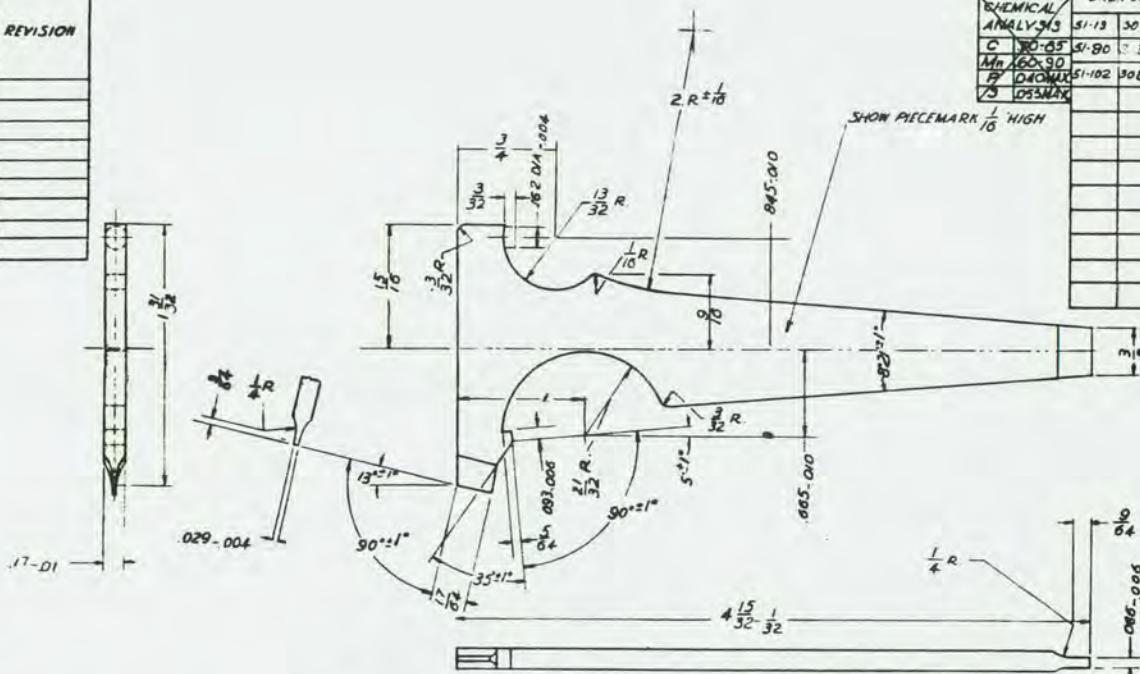
CAL. 30

1/16 R.

LINE NUMBER	LIST OF DRAWINGS	DRAWING NUMBER	REVISION
1	TOOL, COMBINATION	C 6145	
2			
3			
4			
LINE NUMBER	LIST OF SPECIFICATIONS	SPECIFICATION NUMBER	REVISION
1			
2	MANUFACTURE AND INSPECTION OF SMALL ARMS		
3	WEAPONS AND ACCESSORIES	U.S.A 520-1	
4	METALS; GENERAL SPECIFICATION FOR INSPECTION OF	FED QQ-N-51	
5	STANDARD SPECIFICATIONS FOR MARKING SHIPMENTS	U.S.A 100-2	
6	FINISHES, PROTECTIVE, ON IRON AND STEEL PARTS (FOR		
7	ORDNANCE MATERIEL)	U.S.A 570-2	
8	STEEL, CARBON AND ALLOY, BARS	U.S.A 57-107	
9			

**HEAT TREATMENT & FINAL FINISH**

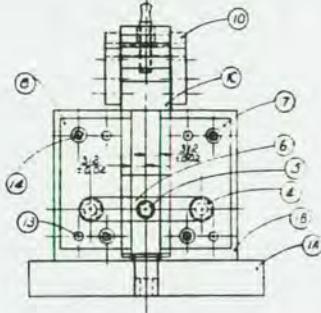
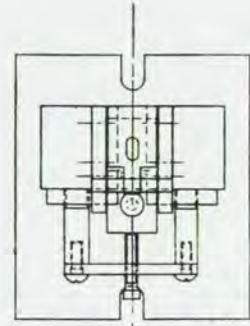
**HEAT TO 1450-1475°F QUENCH IN WATER  
TEMPER 500-550°F. ADJUST TO OBTAIN  
SPECIFIED HARDNESS. FINISH-TYPE II  
(PHOSPHATE COATING)**



TOOL COMBINATION © 64145  
STEEL-M.D. 1075 FINISH S  
LIST OF DRAWINGS & SPECIFICATIONS  
SHOWING REVISIONS IN EFFECT ON

SYMBOL		
DETI		
APPROVED	APPROVED	FOR BUREAU
3CR	WBD	BY
7-18-44		RECORDED
JULY 18 1944		SEARCHED
W. Wallender		INDEXED
		SERIALIZED
		FILED
APPROVED BY DIRECTOR OF THE		
CHIEF OF STAFF AIR FORCE		
SP Salvage		
AT COLD SPRINGS, N.Y.		
ORDNANCE DEPT. U.S.A.		

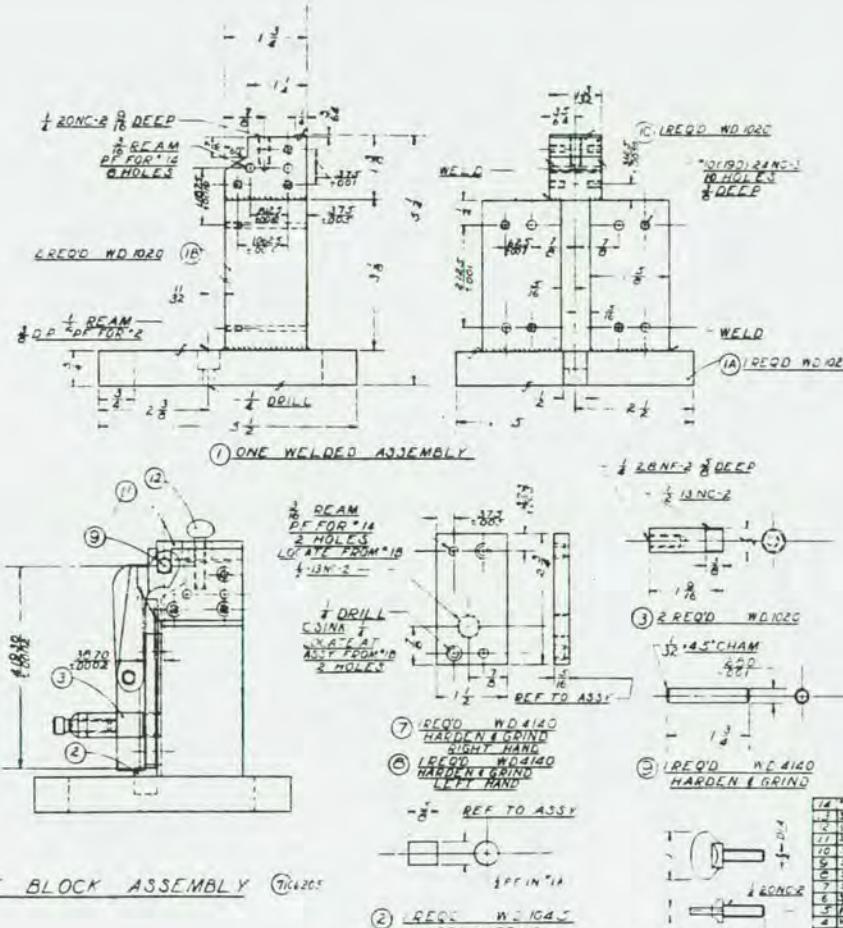
TOLERANCE .01 ALLOWED ON ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED  
SUPERSEDES OLD TRACINGS A7364 & B6935 UNDER REVISION DATE OF MARCH 1, 1937



Fixture, Grinding, Bolt Block Assembly (71G6205)

NOTE: REDRAWN FROM SPRINGFIELD ARMORY DRG A2401

**BROWNING AUTO RIFLE CAL. 30 M 1918-42**



### STALE

1-SHEE

(12) REQ'D WD = 4  
OPTIONAL USE SHOULD  
THUMB SCREW

3 EPT 7/1943		DATE	NUMBER	REVISION	FILE
REVISIONS					
1/1		TELEGRAM TO ENGINEERS NET ENGINEERS 8-101 FRACTION 1 1/4 MILLAR 1 1/4			
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